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ABSTRACT

The different practice styles of young internists and the relationship between training and practice were studied as part of the National Study of Internal Medicine Manpower, Phase III. The practices of four groups of physicians were compared: general internists with traditional residencies, general internists who received their residency training in special primary care tracks, family physicians, and subspecialty internists. Additional study objectives were to determine the extent to which the primary care track residency training programs meet their objectives, and to develop models explaining the career decisions made by students and young residents. Four surveys were administered: the Locator/Screener Survey, the Physician Questionnaire, the Log-Diary, and the Patient Questionnaire. Practice characteristics for each physician group were assessed, including location, office organization, financial characteristics, accessibility, and productivity. Patient concerns included: demographic characteristics, medical conditions, patient functional abilities, and patient/physician relationships. The career orientations of residency training departments were evaluated, along with the types of primary care and ambulatory care training provided. The survey instruments are appended. (SW)

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A National Study of Internal Medicine -- Phase III

Analysis of 1976-1977 Resident Cohort Currently in Practice

Final Report
Covers Period of Performance
During
July 1, 1980 - August 31, 1983

Contract No. HRSA 232-80-0032

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Mary Kay Schleiter

Alvin R. Tarlov

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INTRODUCTION

Section A. Background

The National Study of Internal Medicine Manpower was begun in 1976. The purposes of the study were: 1) to learn about the size, scope, and content of the internal medicine training effort; 2) to reach an understanding of the relationship between training and practice and potential implications for U.S. medical care; and 3) to form a basis for intelligent policy decisions. This series of studies had three planned phases. Phase I was a collection and analysis of baseline data; Phase II was an indirect and therefore preliminary analysis of the relationship between training and practice; and Phase III was a study of the practices of young internists and the determinants of different styles of practice.

Phase I, which began with the joint support of the Bureau of Health Manpower, Health Resources Administration, and the Federated Council for Internal Medicine, provided a starting point for a better understanding of internal medicine training programs and trainees (1). Four sets of data were collected, referred to as Questionnaire I (Q-I), Q-II, Q-III, and Q-IV.

Q-I was a national survey, in 1976, of all residency training programs in internal medicine. For each program, the number and characteristics of residents in training, the size of the faculty, the content of training, the sources of financial support for training, the size of the research effort, a list of subspecialty fellowship programs based in the institution, and the names of each resident and

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1. Weil PA, Tarlov AR and Schleiter MK. THE NATIONAL STUDY OF INTERNAL MEDICINE MANPOWER: FINAL REPORT (Phase I). Division of Medicine, Bureau of Health Manpower, Health Resources Administration, Department of Health, Education and Welfare Contract No. HRSA 231-76-0059, 1979.

fellow associated with the program in 1976-1977 were obtained.

The results of Q-I revealed the large impact of internal medicine training on U.S. physicians (2). The size of the internal medicine training effort was great: more than half of all practicing internists participated in the training of residents and fellows. Between 34% and 39% of each medical school graduating class spent their first post-graduate year in an internal medicine residency position. An additional one-third rotated for a variable number of months on internal medicine teaching services. The bulk of financial support for residents and teaching staff was provided by hospital revenue (including Medicare and other third-party payors). Local, state, and federal governments, by direct appropriation, provided 25% of residents' stipends and teaching staff salaries.

A typology of residency training was constructed from the information provided by Q-I about the content, size, and milieu of each training program (3). It was found that internal medicine residency programs could be categorized into five types, ranging from the largest, most research-oriented programs (Type I) to small programs based in community hospitals (Type V). The largest residency programs had the most subspecialty programs, and their residents were the most likely to plan to pursue subspecialty fellowship training after completing their residency training.

Q-II was a national survey of all 1512 internal medicine subspecialty training programs. Through this survey, subspecialty training programs were identified and enumerated for the first time. Residency training program directors, members of the

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2. Tarlov AR, Weil PA, Schleiter MK, and The Association of Professors of Medicine Task Force on Manpower: National Study of Internal Medicine Manpower: I. Residency training 1976-1977. Ann Intern Med 1978;88:413-20.

3. Weil PA, Schleiter MK, and Tarlov AR: National Study of Internal Medicine Manpower: II. A typology of residency training programs in internal medicine. Ann Intern Med 1978;89:702-15.

Association of Professors of Medicine, and subspecialists throughout the country participated in this initial identification of internal medicine subspecialty training programs. Q-II provided information about each of these programs including: the size of each program; the sources of financial support; the content of training; the characteristics of affiliated hospitals used for training; and the number of physicians involved in teaching and research (4).

Q-II revealed that, for the years 1972-1973 through 1976-1977 the number of fellows in subspecialty training grew at an average rate of 10% per year. Twenty-six percent of these fellows were foreign medical graduates. Stipend support for fellows in 1976-1977 totalled $90 million, of which 40.1% came from direct federal appropriations.

Q-I and Q-II formed the bases for an annual census of residency and fellowship training, mapping growth and change in the number of programs, the number of trainees, and the demographic composition of each cohort (4, 5, 6) and a directory of training programs in internal medicine (7).

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4. Tarlov AR, Weil PA, Schleiter MK, and The Association of Professors of Medicine Task Force on Manpower: National Study of Internal Medicine Manpower: III. Subspecialty fellowship training, 1976-77. Ann Intern Med 1979;91:287-94.

5. Tarlov AR, Schleiter MK, Weil PA, The Association of Professors of Medicine Task Force on Manpower: National Study of Internal Medicine Manpower: IV. Residency and fellowship training, 1977-78 and 1978-79. Ann Intern Med 1979;91:295-300.

6. Schleiter MK and Tarlov AR: National Study of Internal Medicine Manpower: VIII. Residency and Fellowship Training 1981-1982 and 1982-1983. Ann Intern Med 1983;97:762-768.

7. National Study of Internal Medicine Manpower. Directory of Training programs in Internal Medicine: Residency and Fellowships. Chicago: National Study of Internal Medicine Manpower, University of Chicago, February, 1983.

Q-III was a survey of a national sample of residents and fellows in training during 1976-1977. The backgrounds, educations, career values, and goals for the future were obtained.

Residents were classified according to whether they sought careers as predominantly general internists or subspecialty internists, and the two groups were compared (8). Those who planned general internal medicine careers had incurred higher educational debts, had trained in medical schools in the states where they had spent their childhoods, and were motivated by the desire to retain independence in their work.

A multivariate model tested the predictors of the academic versus practice career choice (9). The weighting of prerogatives of the job in the person's career decision-making was the most important predictor. Other important factors were the orientation of the medical school attended toward either academic careers or practice, MCAT score, score on an Investigative Interest scale, and type of role model. The argument that background and personal variables were more predictive of this career choice than were education and training institutions was supported.

Q-IV, supported by the Kaiser Family Foundation, was a survey of physicians who had completed internal medicine training in 1973 and entered practice. The practices of the physicians were described, their prior training programs identified, and questions were asked about the decision-making process which had led them to choose

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8. Weil PA, Schleiter MK, Tarlov AR: National Study of Internal Medicine Manpower: V. Comparison of residents in internal medicine: future generalists and subspecialty internists. Ann Intern Med 1981;94:678-90.

9. Weil PA, Schleiter MK: National Study of Internal Medicine Manpower: VI. Factors predicting preferences of residents for careers in primary care or subspecialty care and clinical practice or academic medicine. Ann Intern Med 1981;94:691-703.

their current practice situation.

Phase II was a joint project of the National Study of Internal Medicine Manpower at the University of Chicago and the Medical Activities and Manpower Projects of the University of Southern California. It involved no data collection but was an analysis of the impact of training on practice patterns: training program data was linked with data describing the practices of former graduates of the programs. Since secondary data sources not designed for the purposes of this analysis were used, the results of Phase II were considered preliminary. The study showed an apparent interaction between characteristics of training programs and both the complexity of services that the physicians provided and the amount of time they spent in ambulatory care practice (10).

In order to see the true impact of the residency training program, as well as other factors, on behavior, attitudes and decision-making in practice, it was necessary to look at the practices of these physicians after they were out of training and were pursuing the next stage of their careers. This was the goal of Phase III of the National Study of Internal Medicine Manpower, the phase described in this report. In Phase III, the 1981 practices of the physicians surveyed in 1977 when they were residents and fellows (in Q-III), along with other physicians in the same cohort, can be looked at in light of the characteristics of their training programs in 1976-1977, their personal background and education, and the goals and career values they expressed in 1977 when they were residents.

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10. Tarlov AR et. al. NATIONAL STUDY OF INTERNAL MEDICINE MANPOWER, PHASE II: INTEGRATION AND ANALYSIS OF TWO LARGE DATA SETS RELATED TO INTERNAL MEDICINE: FINAL REPORT. Division of Medicine, Health Resources Administration, Department of Health, Education and Welfare Contract No. HRSA 232-78-0185, 1980.

Section B. Phase III Study Objectives

The major goal of Phase III is to describe in depth the practices of young internists in order to begin to understand the determinants of different practice styles, especially the relationship between training and practice, and to compare the practices of four groups of physicians: general internists with traditional residencies, general internists who received their residency training in special primary care tracks, family physicians and subspecialty internists. The study provides broad information about the current positions, activities, patients and physician/patient relationships, demographic characteristics and family backgrounds, and educational and training histories of a cohort of young physicians. Building upon the prior phases of the National Study of Internal Medicine Manpower as well as the current study results, this report will try to respond to research and policy questions of the content and determinants of these young physicians' practices.

The report addresses five major objectives:

OBJECTIVE 1. to describe the practice characteristics of general internists and subspecialty internists and, in addition, family physicians and general internists who were trained in primary care tracks;

OBJECTIVE 2. to compare and highlight the differences in the practice characteristics among the four physician groups;

OBJECTIVE 3. to assess the relationship of specific practice characteristics to prior training experiences;

OBJECTIVE 4. to evaluate the extent to which the primary care track residency training programs meet their objectives;

OBJECTIVE 5. to further develop models which explain the career decisions made by students and young residents in training.

Section C. Methods

Survey Instruments

This report is based on the analyses of four data sets derived from four surveys conducted in 1981. In addition, data from Phase I of the National Study of Internal Medicine Manpower provide a view of the goals and expectations of a large segment of the sample prior to their entry into practice (Q-III), allowing for a fuller understanding of the career decision-making process, and the characteristics of the 1976-1977 residency training programs (Q-I) supports the analysis of the relationship between training and practice.

The 1981 (Phase III) survey instruments were designed to summarize the careers, practices, patients, and patient/physician relationships of young general internists, general internists who were trained in primary care tracks, subspecialty internists, and family practitioners. The four surveys were: the Locator/Screener, the Physician Questionnaire, the Log-Diary, and the Patient Questionnaire.

The Locator-Screener

The Locator-Screener Survey had three goals: to find a verified address for each physician in the sample; to collect base-line information about the physicians' practices and careers; and to categorize the sample into two groups -- those who

would be asked to participate in the rest of the Phase III surveys and those who would not be included. Current addresses of the study population were obtained from a combination of sources including the AMA Physician Master-File, the American Board of Internal Medicine, the American College of Physicians, the residency training program directors, and the medical schools.

Sample physicians were contacted by phone to verify both their address and their training history in order to confirm their identity as the former 1976-1977 resident or fellow. A brief description of the first practice position after completion of training, the number of places where they had practiced since leaving training, a brief characterization of their current practices and practice community and patient population, and whether or not they were planning to move their professional practice in the next year (and if so, where the new practice would be) were also requested.

The survey was conducted by telephone, in June, July and August, 1981. Interviewers were able to locate 89% of the physicians in the original sample.

Physician Questionnaire

The purpose of the Physician Questionnaire was to gain information about how the physicians' practices were organized, how they found or were recruited into their current practices, and what were their goals for the following five years. In an effort to obtain this understanding, data items included demographic information as well as social, cultural, and economic information from the respondent physician. Information was also obtained regarding the details of the training history, practice history, motivators related to both career values and lifestyle, the location of the current practice, measures of productivity, preventive care practices, and organizational characteristics of the practice.

The Physician Questionnaire, a self-administered booklet, was mailed to the physicians in successive waves in September and October, 1981. It required 45 to 60 minutes of the respondent's time for completion.

Physician Log Diary

The purpose of the Log-Diary was to obtain a detailed description of each patient encounter the physician had during a three day period. Both outpatient encounters and hospital inpatient visits were included.

The instrument requested the identity of the patient (if the patient agreed), the day and location of the visit, the patient's age, sex, and race or ethnicity, the major source of payment for the visit, details about the type of patient/physician relationship and its length, and an evaluation of the patient's overall physical condition. In addition, tests and therapies either performed or ordered during each visit were listed and the patient's major diagnoses and major health problem were described.

The Log-Diary, a large spiral-bound booklet, was a self-administered instrument. The respondent burden was approximately two hours over the course of three assigned study days during September and October, 1981. The development of the Log Diary was based upon an instrument first used by Robert Mendenhall in the Medical Activities and Manpower Projects (11).

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11. Mendenhall RC, Lloyd JS, Repicky PA, Monson JR, Girard RA and Abrahamson S: A national study of medical and surgical specialties: II. Description of the survey instrument. JAMA 240:1160-1168, 1978.

Because of the great respondent burden, a network of senior and respected members of the Internal Medicine and Family Practice specialties was organized to communicate the importance of participation to the survey respondents. The network included the residency training program directors of the programs the respondents had attended and the seventy Governors of the American College of Physicians. Each physician received a letter from his or her residency training program director prior to being asked to participate in the study. Internists in the sample received three phone calls -- prior, during, and following his or her Study Days -- from the area Governor of the American College of Physician. Family physicians in the sample were called by their respective residency training program directors. This network of physician encouragers had a positive impact on the response rate.

Patient Questionnaire

The objective of the Patient Questionnaire was to verify some of the information obtained from the physicians in the Log-Diary, especially information related to the functional status of the patient and primary care indicators such as preventive measures, patient education and follow-up. The questionnaire included queries about the patient's relationship to the study physician and to other physicians, a description of the visit, the patient education and preventive-care counseling of the study physician, measures of satisfaction and access, the patient's health status, health problems and functional status from his or her point of view, and demographic information such as occupation, income, education, sex, and age. The instrument was a self-administered booklet mailed to the patient within three weeks of the visit of that patient recorded by the physician in the Log-Diary.

The Physician Sample

Five comparison groups -- family physicians, general internists who were trained in primary care tracks, general internists who were trained in programs with general primary care support, general internists who were trained in traditional residency programs, and subspecialty internists -- are presented.

The Health Resources Administration and the Robert Wood Johnson Foundation provided support for Internal Medicine residency training programs to establish specially designated primary care tracks which operated separate from and parallel to their traditional programs. The objective of the primary care tracks was to improve access to and comprehensiveness of primary care services by helping residency training programs broaden the scope of training to emphasize: ambulatory care; the importance of patient education and preventive services; proficiency in office gynecology, psychiatry and psycho-social skills, neurology, dermatology, orthopedics, ophthalmology, and otolaryngology. Physicians from those programs are referred to as "Primary Care Track general internists" in the Tables which follow.

Two departments receiving Primary Care Support retained a single residency program but used the support to emphasize primary care for their entire residency group by underwriting faculty time for teaching in the ambulatory unit, organizing house-staff into firms or teams, and by other means. Physicians who completed these two programs have been analyzed separately. In the subsequent Tables these graduates of programs with general support for enhancing primary care training are referred to as "Primary Care Support."

TABLE 1

TRAINING POSITIONS IN 1976-1977

	Q3 1976-77 STUDY OF TRAINEES			Q5 1981 STUDY OF PRACTICING PHYSICIANS								
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
				Telephone Survey Results				Mailed Survey Results				
	Study Popln	Sample	Respon-dents	Study Popln	Sample	Respon-dents	Branch[!] Switch	Sample	Phys. Quex Response	Log Diary Response	Pt. Quex Response	Pt: Phys. Pairs
Family Practice				4,750	329[#]	269 (82%)	FP-259	259	177 (68%)	149	266	131
							OS 10		—	—	—	—
RWJ or BHM Supported Primary Care Track Gen'l Int. Med.				188	168*	153 (91%)	GIM 104	104	79 (76%)	64	95	48
							SS 18	18[a]	12 (67%)	7	9	4
							SS_t 5	—	—	—	—	—
							OS 26	—	—	—	—	—
RWJ Support To Departments For Primary Care Emphasis				82	82	76 (93%)	GIM 22	22	18 (82%)	13	17	9
							SS 33	33[a]	17 (52%)	14	22	9
							SS_t 12	—	—	—	—	—
							OS 9	—	—	—	—	—
General Internal Med.	15,185	1,049	803[x]	13,008	729*	658 (90%)	GIM 257	257	183 (71%)	131	221	99
							SS 287	—	—	—	—	—
							SS_t 77	—	—	—	—	—
							OS 37	—	—	—	—	—
Subspecialty of Internal Med.[!!]	5,885	761	586	4,135	332	306 (92%)	SS 288	288	211 (74%)	154	265	115
							OS 18	—	—	—	—	—
TOTAL	21,070	1,810	1,389	—	1,631	1,454 (89%)	——	973	691 (71%)	530	889 (72%)	411

FOOTNOTES TO TABLE 1

! Some residents during the course of training branch into a subspecialty of internal medicine, and others switch out of internal medicine entirely.

GIM = practicing general internists

SS = practicing subspecialty internists

SS_t = in subspecialty fellowship training at the time of the 1981 survey

OS = other specialty

\# These 329 are not representative of the study population. They were selected from 20 family practice departments which received RWJ grant support.

* Nine physicians who were in our 1976-77 study of residents in training were at that time in specifically designated primary care tracks. Therefore, they are enumerated twice - in both rows of data (Primary Care Track General Internists, and General Internists), but only once in the total.

x Seventy-four of these 803 declared in the questionnaire that they did not intend careers in internal medicine. Therefore, only 729 General Internists are included in column (e). The same applies to the stepdown between 15,185 and 13,008 in columns (a) and (d).

‖ All eleven subspecialties were included in the 1976-77 Q3 study. Only six subspecialties (Cardiology, Gastroenterology, Nephrology, Plumonary, Rheumatology, and Hematology/Oncology) were included in the 1981 study. Thus, the stepdown from 5,885 to 4,135 in columns (a) to (d), and from 586 to 332 in columns (c) to (e).

a These subspecialists, though surveyed, are not included in any of the following tables.

TABLE 2

Subspecialty Sample

	Physician Q'aires	Patient Q'aires	Outpatient Encounters	Inpatient Encounters
Cardiology	30	37	394	252
Gastroenterology	31	54	390	265
Nephrology	30	25	213	174
Pulmonary	40	49	490	294
Rheumatology	34	52	685	150
Hematology/Oncology	43	43	432	1[illegible]
Total	211	265	2604	1334

All physicians in the study had been residents or fellows in training in their respective fields in 1976-1977. The five separate comparison groups are defined according to the type of training programs they were in during 1976-1977. The five categories of programs are: Family Practice; Robert Wood Johnson Foundation (RWJ) or Health Resources Administration (HRSA) supported primary care tracks in General Internal Medicine residency programs; internal medicine residency programs with support for primary care emphasis; traditionally organized residency programs in General Internal Medicine; and fellowship programs in a subspecialty of Internal Medicine. The samples used in this study are described in Table 1.

Family Practice

The sample from Family Practice included the 1976-1977 residents of the 21 residency programs affiliated with six Family Practice medical school departments which had received support from the Robert Wood Johnson Foundation for faculty development. The list of Family Practice residents was obtained from the chairmen of Family Practice in each department. Although the family physicians do not represent a random statistical sample but were graduates of a few select programs, these programs are thought to be typical of Family Practice programs in 1976-1977. However, they are not geographically representative; these programs are located in Northwestern and Midwestern states. The collection of data from family physicians was accomplished with the close collaboration of Roger Rosenblatt, M.D., M.P.H., Director, Research Section, Department of Family Medicine, University of Washington.

HRA Supported Primary Care Track General Internal Medicine

The sample of Primary Care Track graduates included the total population of internal medicine residents in primary care tracks during the 1976-1977 academic year. Lists of the residents in the primary care track programs for 1976-77 were obtained from the residency training program directors at the respective hospitals, and confirmed by telephone contact with the sampled physicians. The tables in this report include those who became general internists.

Programs with Funding Support for Primary Care Emphasis

Two residency programs received general support to expand the primary care training within a traditional program without the establishment of a separate primary care track. Those graduates of these programs who remained general internists form the third comparison group.

General Internal Medicine

The general internists were selected from the large group to whom we had previously administered the 1976-77 questionnaire. They can be considered a national sample of the 1976-1977 cohort of internal medicine residents in traditional programs because they were sampled randomly from all 418 internal medicine residency training programs which were active in 1976-1977. Those who became general internists are included in the tables in this report.

Subspecialties of Internal Medicine

The final comparison group is a sample of subspecialists from six subspecialties of internal medicine (See Table 2). These physicians were fellows in 1976-1977. They were part of the 1976-77 study of residents and fellows. In the tables of this report the "Subspecialty Internist" column refers to the study physicians in these six subspecialties only. This is not a representative sample of internal medicine subspecialists in general.

Response Rates

Response rates were 91% for the Telephone Screener-Locator, 71% for the Physician Questionnaire, and 72% for the Patient Questionnaire. At least eleven percent of those who were eligible for the Physician Questionnaire survey were ineligible for the Log Diary for one of four reasons: (1) they did not see any patients during the study period; (2) they practiced only in an Emergency Room; (3) their only patient encounters during the three study days were with patients whom they treated by kidney dialysis; (4) the patients they saw were being cared for primarily by housestaff, and their reason for seeing the patient was for supervision and teaching only. Therefore, the sample for the Log-Diary is smaller than the physician questionnaire sample. Although we do not have enough information to enumerate all of those ineligible, we were able to clearly identify 107. Therefore, the Log Diary response rate is 61% or higher, of those eligible.

Encounter Classification Scheme

A physician's practice may be described in many ways. The specialty or subspecialty may be identified, distributions of diseases treated may be tabulated, and the types of institutions in which encounters between physician and patient take place may be described. These descriptions might assume, but do not actually measure, types of physician/patient relationships. The relationship between physician and patient can take many forms. The physician may feel principal

responsibility for the overall health of the patient within a long-term relationship. The relationship may consist entirely of a single episode of illness with no expectation of future encounters. The relationship may be long term, but focusing only on a limited or specialized set of medical problems.

The encounter classification (described in Figure A) is an attempt to categorize the physician/patient relationship for each encounter in a direct way, independent of related but different factors, such as the physician's specialty or the encounter location. The physician's practice can then be described according to the distribution of encounter types in the practice. This method for defining practices was developed by Mendenhall, Girard and Abrahamson (12). The encounter definitions used here were developed in collaboration with Elizabeth Harkins and Robert Mendenhall and differ somewhat from Mendenhall's original definitions. A new classification, Coordinated Care, was added in an attempt to identify those relationships in which the physician oversees all of the patient care but accomplishes this by coordinating the services of other providers. Essentially, our Coordinated Care plus Principal Care categories combined are equal to the Mendenhall Principal Care category. Encounters are classified into six groups on the basis of answers to a series of questions (See Figure A). The six encounter types are: Consult; Coordinated Care; Episodic Care; Limited Care; New Patient; and Principal Care.

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12. Mendenhall RC, Girard RA, Abrahamson S. "A National Study of Medical and Surgical Specialties: I. Background, purposes, and methodology. JAMA 240: 848-852 (August 1978).

Figure A: Care Classification Algorithm

CONSULT
The encounter is a consult.

NEW PATIENT
The encounter is not a consult.
The physician has never seen this patient before.

EPISODIC
The encounter is not a consult.
The physician has seen the patient before.
There is no ongoing relationship.

PRINCIPAL CARE
The encounter is not a consult.
The physician has seen the patient before.
There is an ongoing relationship.
The physician treats most types of medical problems this patient may have.

COORDINATED CARE
The encounter is not a consult.
The physician has seen the patient before.
There is an ongoing relationship.
The physician does not treat most types of medical problems this patient may have, but only a limited range of problems.
The physician arranges health care for this patient which he or she does not provide.

LIMITED CARE
The encounter is not a consult.
The physician has seen the patient before.
There is an ongoing relationship.
The physician does not treat most types of medical problems this patient may have, but only a limited range of problems.
The physician does not arrange the health care for this patient which he or she does not provide.

Table 3 presents the amount of agreement between patients and physicians in the questions that make up the classification scheme. Although there was substantial agreement, in some cases the patient/physician relationship is defined differently by patient and physician. Patients sometimes did not recognize that an encounter was a consult for another physician -- this occurred 31% of the time when the physician defined the encounter as a consult. Patients were also more likely to define a relationship as an ongoing relationship, and as being comprehensive. The most disagreement occurs in the question of whether or not the physician would personally make arrangements for care for the patient which that physician did not provide. The patient expects the physician to do so in 73% of the cases in which the physician says he or she would not personaliy make such arrangments. When the physician believes the patient is seeing other physicians (shared care), 42% of the time this assumption is denied by the patient -- the patient claims not to be under the care of other physicians. In some cases these differences may be due to a difference between patient and physician in the understanding of the question. However, there does appear to be some real and systematic disagreement. In general, the patient feels a closer, more comprehensive relationship with the physician than the physician assumes.

TABLE 3

Percent of Patients Agreeing with Physicians

Physician's Response	Yes	No	Total Agreement	n
Consult	69%	92%	89%	82
Seen Before	89	91	89	89
Ongoing Relationship	90	49	85	58
Comprehensive	81	70	78	71
Arranged	83	27	70	60
Shared	58	74	68	78

This table represents the percentage of patient responses given in the patient questionnaire which agree with responses provided by their physicians on the corresponding Outpatient Encounter Form.

Source Questions for Table 3:

1) Consult: is this visit a consult requested by another physician?

2) Seen Before: have you seen this patient before?

3) Ongoing Relationship: do you have an ongoing medical relationship with this patient?

4) Comprehensive: which better describes the range of medical problems for which you expect to treat this patient?

5) Arranged: will you or your staff arrange health care for this patient that you do not provide?

6) Shared: is this patient under the care of other physicians?

Note -- All the above six questions are from the Outpatient Encounter Form. The similar questions used to gain patient answers by way of the Patient Questionnaire have not been included due to their redundancy.

Physician Practice Study Report Format

Tables 4 through 65 of the Physician Practice Study are divided into three general chapters. The first and second chapters are concerned with the descriptive characteristics of physician and patient groups. The third chapter deals more directly with the Primary Care Track general internists. Within each of these three chapters are "objective" subheadings which provide for a logical and sequential structure for the reading of the data tables.

The enclosed tables present the initial results of the Physician Practice Study. The number of respondents reported vary according to whether the whole population or some portion of the whole is covered. In most cases, a few responses were either missing or not usable. Table 1 (pages 13 and 14), columns i, j, and k, should be referred to for information about the total number of respondents in each category.

The Family Physician columns include the 177 family physicians who completed the physician questionnaire, the 149 who completed the log diary and the 266 patients of family physicians. The "Primary Care Track General Internist" columns include the 79 general internist graduates of primary care tracks who completed the physician questionnaire, the 64 who completed the log diary, and their 95 patients who completed the patient questionnaire.

The "General Internist" columns include 173 of the 183 physicians who were in the traditional internal medicine residency programs. (Ten physicians who were in primary care tracks which were not supported by or HRSA are not included in Tables 4 through 65.) Log diaries were completed by 121 of these and 200 of their patients completed questionnaires.

The "Subspecialty Internist" columns include the 211 physicians from the subspecialty sample who responded to the Physician Questionnaire, 154 who responded to the Log Diary and their 265 patients.

The "Primary Care Support" column refers to the general internists who were graduates of programs with support for Primary Care emphasis: 18 of them responded to the physician questionnaire, 13 responded to the log diary and 17 of their patients responded. This small group is included only for interest and is not included in calculations of statistics.

CHAPTER ONE. PHYSICIAN CHARACTERISTICS

Overview

In this section, the physicians' practices are described and the different physician groups are compared. The location, office organization, financial characteristics, accessibility and productivity measures are included in these comparisons.

Section A. Geographic Information

Tables 4 through 7 describe the distribution of practice locations for each group. Family physicians are more evenly distributed than the other groups among types of areas within their city or town: one quarter are in shopping districts and another quarter in residential areas. Most subspecialists (58% of the sample) practice in medical island/hospital complexes. The differences among specialty groups are reduced when one looks at office-based physicians only (Table 5).

The distributions according to types of cities are shown in Tables 6 and 7. Because the Family Practice sample is not geographically representative, conclusions about family physicians from these tables should not be made. The General Internal Medicine and subspecialty groups appear similar in their distributions among types of cities (large city - suburb - small town). The preference of subspecialty internists for cities of 50,000 or greater population is clear (79%, 63-65%, 37% for subspecialty internists, general internists and family physicians respectively). Primary Care Track compared to traditionally trained internists exhibit similar locational preferences in terms of neighborhood, type of city, and city size.

TABLE 4

Neighborhood in Which Practice Is Located

	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Central Business District	12%	13%	13%	13%	29%
Shopping District	25	16	21	12	24
Medical Island/ Hospital Complex	30	45	42	56	35
Residential	28	22	23	18	12
Other	5	4	1	1	0
Total	100%	100%	100%	100%	100%
n physicians	(173)	(76)	(157)	(199)	(17)

Chi-Square Tests:

1. Chi-square for the four physician groups (excluding the small "Primary Care Support" group) is not significant.

2. Comparing Primary Care Track graduates and General Internists:

   chi-square=41.37 d.f.=12 p<.0001

Source Question:

Which of the following phrases comes closest to describing the area in which your main practice is located?

TABLE 5

Neighborhood in Which Practice Is Located: Office-Based Physicians Only

Practice Area	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Central Business District	13%	15%	14%	16%	40%
Shopping District	28	20	26	17	20
Medical Island/ Hospital Complex	28	44	37	48	30
Residential	27	19	23	19	10
Other	4	2	0	0	0
Total	100%	100%	100%	100%	100%
n physicians	(138)	(41)	(111)	(135)	(10)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=22.15 d.f.=12 p<.0359

2. chi-square comparing Primary Care Track graduates and General Internists is not significant.

Note: Chi-square may not be valid due to small cells.

Source Question:

Which of the following phrases comes closest to describing the area in which your main practice is located?

TABLE 6

Practice Location: Type of City

City Type	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Large City	19%	47%	42%	49%	33%
Suburb	18	25	30	24	22
Small City/Town	63	28	28	27	45
Total	100%	100%	100%	100%	100%
n physicians	(172)	(79)	(166)	(210)	(18)

Chi-square tests for either of the four physician group (excluding the small "Primary Care Support" group) or comparing Primary Care Track graduates and general internists are not significant.

Source Question:

Is your practice or position in a city with a population greater than 250,000 or within 50 miles of such a city?

TABLE 7

Practice Location: Size of City

City Size	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
250,000+	19%	47%	42%	49%	33%
50,000-250,000	18	16	23	30	43
25,000-50,000	12	16	13	15	6
5,000-25,000	27	13	18	4	6
Town < 5,000	21	4	4	1	6
Rural Areas	3	4	0	1	6
Total	100%	100%	100%	100%	100%
n physicians	(172)	(79)	(166)	(210)	(18)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=34.14 d.f.=10 p<.0002

2. Chi-square comparing Primary Care Track graduates and general internists is not significant.

Source Question:

Is your practice or position in a city with a population greater than 250,000 or within 50 miles of such a city?

Section B. Office Organization

Tables 8 through 15 describe the organization of the practice. Ninety percent of the family physicians are based in private offices (Table 8); the internists practice in more varied settings. About one-third of the general internists and 43% of the subspecialists are hospital-based (hospital outpatient, emergency room, or within the hospital).

The prevalence of different institutional arrangements and practice types in the practice of the young internist is shown in Tables 9 through 12. Table 11 describes the main practice type. Compared to family physicians, general internists and subspecialty internists are more often in solo practice. The primary care tracks sent twenty percent of their General Internal Medicine graduates to full-time academic positions. Nineteen percent of the subspecialists are also in academic positions.

The main practice type does not describe the whole practice, as Table 12 shows. This table depicts the percent of physicians who spend any of their time in each of the practice sites listed. Since many physicians spend some time in more than one place, percentages do not add to 100%. Part-time and voluntary arrangements are a part of the practices of the majority of young internists and family physicians. The primary care track graduates have high participation in academic activities compared to other general internists and family physicians: 47% spend some time in academic arrangements, 34% as salaried academic physicians (Table 12). Half of the subspecialists also participate in academic programs. The nursing home is a part of the practices of 14% of the primary care track graduates, 10% of other general

internists and 11% of family physicians (Table 12), although the time devoted to nursing homes in the aggregate is less than 1% (Table 9).

The primary care track residency programs emphasized innovative forms of health services, including working in collaboration with nurse clinicians, nurse practitioners and other new health professionals, as well as the related professions of psychology and social work. As shown in Table 15, the general internists generally work more often with other health professionals than do subspecialists and family physicians. This is especially true when the internists work with other professionals beyond nurses.

TABLE 8

Type of Facility in Which Main Practice Is Located

(Percentages)

Facility Type	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Private Office	90%	67%	69%	57%	65%
Hospital Outpatient	8	27	10	17	23
Emergency Room	2	4	15	1	6
Hospital	0	1	5	25	6
Extended Care Facility	0	1	1	0	0
Total	100%	100%	100%	100%	100%
n physicians	(171)	(76)	(159)	(201)	(17)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=17.29 d.f.=4 p<.0017
   (Chi-square may not be valid due to small cells.)

2. Comparing Primary Care Track graduates and General Internists:
   chi-square=152.35 d.f.=12 p<.0001

Source Question:

Which of the following best describes the site of your main practice?

TABLE 9

Institutional Arrangements and Practice Type: Percent Distribution of Time

Practice Type	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Solo Office	10%	14%	17%	16%	16%
One-Specialty Group	48	23	27	29	17
Multi-Spec. Group	20	12	19	16	32
Health Center	2	8	6	1	5
Academic (Salary)	9	24	9	22	16
Other Academic	1	1	1	2	2
VA Hospital	1	3	2	5	4
Other Hospital	3	9	10	3	1
Nursing Home	0	1	1	0	1
Military	3	2	3	3	0
Other	3	3	5	1	6
Total	100%	100%	100%	100%	100%
n physicians	(174)	(79)	(166)	(211)	(18)

Source Question:

Over a year's time, how is your current professional time divided among the following practice arrangements and positions?

TABLE 10

Institutions Arrangements: Distribution of Time.

(Foreign Medical Graduates Only)

Time Distribution	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Solo Office	25%	45%	22%	22%	—
One-Spec. Group	0	0	23	28	—
Multi-Spec. Group	0	50	12	10	—
Health Center	25	0	0	5	—
Academic (Salary)	50	0	17	21	—
Other Academic	0	0	2	2	—
VA Hospital	0	0	0	6	—
Other Hospitals	0	0	0	3	—
Nursing Home	0	5	7	1	—
Military	0	0	8	0	—
Other	0	0	9	2	—
Total	100%	100%	100%	100%	
n physicians	(4)	(2)	(12)	(42)	(0)

Source Question:

Please enter in the box below the letter from Question 14 that identifies your main practice--that is, the one which you see most of your patients.

TABLE 11

Institutional Arrangements: Main Practice Type

Practice Type	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Solo Office	11%	16%	20%	18%	18%
One-Spec Group	51	25	29	30	23
Multi-Spec Group	19	13	22	18	23
Health Center	2	8	4	1	6
Academic (Salary)	6	20	7	19	12
Other Academic	0	0	0	1	0
VA Hospital	1	3	2	5	6
Other Hospitals	2	8	6	2	0
Nursing Home	0	0	1	0	0
Military	4	3	3	3	0
Other	4	4	6	3	12
Total	100%	100%	100%	100%	100%
n physicians	(171)	(75)	(159)	(204)	(17)

TABLE 11 -- CONTINUED

Chi-Square Tests:

1. Chi-square is not significant for the four physician groups (excluding the small "Primary Care Support" group).

2. Comparing Primary Care Track graduates and General Internists:

   chi-square=79.11 d.f.=30 p<.0001

Note: Chi-square may not be valid due to small cells.

Source Question:

Over a year's time, how is your current professional time divided among the following practice arrangements and positions?

TABLE 12

Institutional Arrangements and Practice Types in Which Some Time is Spent

(% of physicians who spend any time in these practice types.)

Practice Type	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Solo Office	10%	15%	20%	20%	.033	17%
One-Spec. Group	51	29	30	32	.001	17
Multi-Spec. Group	18	15	22	17	ns	33
Health Center	7	11	8	2	.037	11
Academic	16	34	13	30	.001	17
Other Academic	20	13	14	20	ns	22
VA Hospital	0.5	5	4	9	.001	17
Other Hospitals	5	14	14	12	.025	6
Nursing Home	11	14	10	4	.023	11
Military	3	4	3	4	ns	6
Other	14	8	12	3	.001	11
n physicians	(177)	(79)	(166)	(211)		(18)

*Based on chi-square test for the four physician groups (excluding the small "Primary Care Support" group). The chi-square comparing Primary Care Track graduates and general internists is not significant for the first four practices.

Source Question:

Please enter in the box below the letter from Question 14 that identifies your main practice--that is, the one which you see most of your patients.

TABLE 13

Total Number (Mean) of Physicians in Practice by Practice Type

Practice Type	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Solo Office (number)	1 (16)	1 (11)	1 (32)	1 (36)	ns**	1 (3)
One-Spec. Group (n)	3 (87)	5 (18)	4 (46)	3 (62)	ns	6 (4)
Multi-Spec. Group (n)	25 (33)	39 (10)	27 (35)	28 (36)	ns	30 (4)
Health Center (n)	12 (4)	12 (6)	5 (7)	4 (1)	ns	2 (1)
Academic (Salary) (n)	8 (10)	10 (13)	31 (10)	12 (36)	ns	38 (2)
Other Academic (n)	0	0	0	22 (1)	ns	0
VA Hospital (n)	95 (1)	9 (2)	18 (3)	8 (9)	01	45 (1)
Other Hospital (n)	3 (4)	7 (6)	6 (9)	36 (4)	29	0
Nursing Home (n)	0	0	23 (1)	0	ns	0
Military (n)	10 (6)	17 (2)	7 (3)	20 (6)	ns	0
Other (n)	7 (7)	8 (3)	7 (9)	2 (5)	ns	8 (2)
n physicians	(168)	(71)	(155)	(196)		(17)

TABLE 13 -- CONTINUED

*Based on Analysis of Variance for unbalanced design for the four physician groups (excluding the small "Primary Care Support" group).

** ns = Not Statistically Significant.

The result of the test comparing Primary Care Track graduates and general internists is not significant in all cases except "Military" ($p<.015$).

Source Question:

We would like to know how many full time physicians, including yourself, work directly with you in this main practice. If you are in academic medicine exclude residents and fellows, but include staff physicians in your section.

TABLE 14

Number of Physicians in the Practice: Office-Based Physicians Only

Number Physicians	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Solo	10%	19%	22%	23%	18%
2 Physician	16	22	17	26	18
3-4	47	14	25	23	9
5-6	8	8	8	5	18
7-8	5	11	4	4	0
9-10	3	0	2	0.7	9
Over 10	11	27	22	19	27
Total	100%	100%	100%	100%	100%
n physicians	(133)	(37)	(110)	(128)	(11)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=44.21 d.f.=18 p<.0005

2. Chi-square comparing Primary Care Track graduates is not significant.

Note: Chi-square test may not be valid due to small cells.

Source Question:

We would like to know how many full time physicians, including yourself, work directly with you in this main practice. If you are in academic medicine exclude residents and fellows, but include staff physicians in your section.

TABLE 15

Health Professionals Working with Physicians in the Practice

(Office-Based Physicians Only)

Health Professionals	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Nurse Clinician	3%	15%	10%	13%	.017	9%
Other R.N.	55	50	57	54	ns	56
Practical Nurse (L.P.N.)	53	33	50	25	.001	36
Physical Assistant	28	23	24	17	ns	18
Psychologist	15	18	11	5	.030	9
Social Worker	14	28	17	19	ns	9
Dietician	18	43	24	21	.057	27
Medical Technician	41	40	42	40	ns	45
Health Educ. Education	8	23	10	5	.013	0
n physicians	(138)	(40)	(111)	(135)		(11)

*Based on chi-square test for the four physician groups (excluding the small "Primary Care Support" group). Chi-square comparing Primary Care Track graduates and general internists is not significant except in the following cases: L.P.N. ($p < .056$); Dietition ($p < .030$); Health Educ. ($p < .046$).

Source Question:

Which of the following types of health professionals work with you in patient care in your main practice?

Section C. Financial Characteristics

Table 16 shows that a large number of young internists and family physicians are in salaried positions. Subspecialists are less often in salaried positions. Primary care track graduates are the most likely to be in salaried positions. General internists and subspecialists are the most likely to be in solo or "expense sharing only" arrangements. Subspecialists are more likely to be independent and family physicians are the least likely -- as measured by 70% of family physicians being involved in either income and/or expense sharing arrangements.

Figure B and Table 17 indicates that subspecialists have an income which is 40 to 50% higher than general internists and family physicians. Also, the variance in the income of subspecialists is much higher than the other physician groupings. Table 18 shows that income among academic physician groupings is much more equal and constant. Table 19 shows that office-based physicians have larger incomes and higher variance of income.

TABLE 16

Expense and Income-Sharing Arrangements: Office-Based Physicians Only

Income Arrangements	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Salary	20%	28%	18%	13%	9%
Single MD Private Practice	10	21	19	24	18
Expense Sharing Only	26	18	30	20	18
Equal Expense and Income Sharing	11	10	7	21	9
Unequal Income Sharing	33	23	27	21	45
Total	100%	100%	100%	100%	100%
n physicians	(139)	(39)	(113)	(137)	(11)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=30.15 d.f.=12 p<.0027

2. Chi-square comparing Primary Care Track graduates and general internists is not significant.

Source Question:

Below are descriptions of some common expense-and income-sharing arrangements. Please read each carefully and circle the number for the one which comes closest to describing the financial arrangements in your main practice.

FIGURE B

INCOME BY SPECIALTY

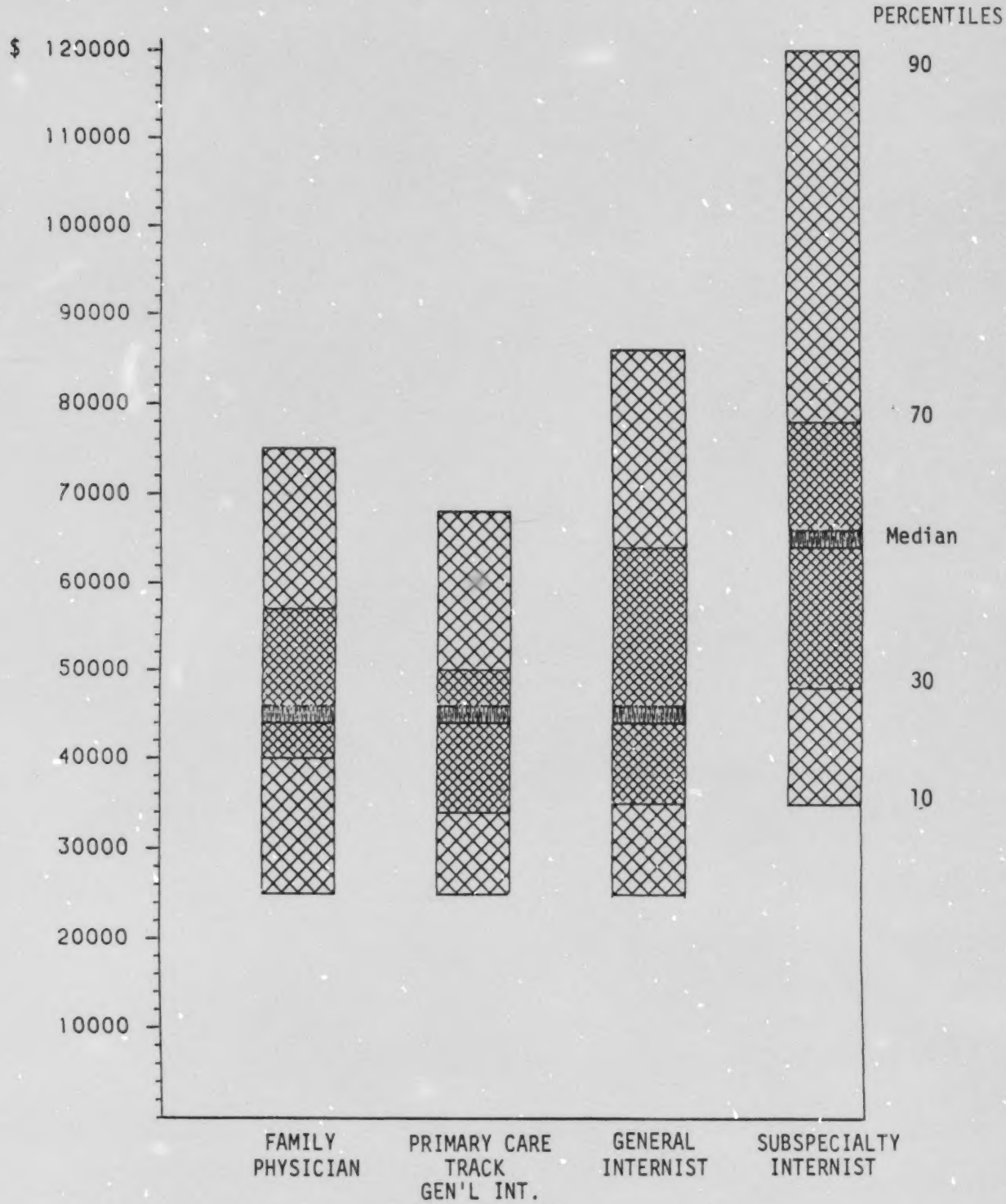

TABLE 17

Physician Income

Physician Income	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Under $20,000	3%	7%	6%	1%	11%
$20,000-$29,999	9	8	7	1	6
$30,000-$39,999	18	26	13	8	6
$40,000-$49,999	32	27	25	20	39
$50,000-$59,999	11	13	15	16	22
$60,000-$69,999	15	14	12	14	0
$70,000-$79,999	7	1	9	11	6
$80,000-$89,999	3	3	5	6	6
$90,000-$99,999	1	0	4	4	0
$100,000-$139,999	1	0	4	12	0
$140,000 and over	0	1	0	6	6
Total	100%	100%	100%	100%	100%
Median	$45,000	$45,000	$45,000	$65,000	$45,000
Mean	$49,000	$46,000	$54,000	$72,000	$52,000
S.D.	$17,000	$18,000	$23,000	$32,000	$27,000
n physicians	(176)	(77)	(163)	(205)	(18)

TABLE 17 -- CONTINUED

Chi-square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=112.44 d.f.=30 p<.0001

2. Comparing Primary Care Track graduates and General Internists:
   chi-square=19.15 d.f.=10 p<.0384

Note: Chi-square may not be valid due to small cells.

Source Question:

What was your income for 1980, from your professional work, after deducting office expenses but before deducting retirement contributions and taxes?

TABLE 18

Physician Income: Full-Time Academics Only

Income (Academics)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Under $20,000	0%	0%	25%	0%	50%
$20,000-$29,999	10	0	8	5	0
$30,000-$39,999	20	54	25	35	0
$40,000-$49,999	30	33	33	35	0
$50,000-$59,999	10	13	0	8	50
$60,000-$69,999	30	0	8	8	0
$70,000-$79,999	0	0	0	3	0
$80,000-$89,999	0	0	0	3	0
$90,000-$99,999	0	0	0	0	0
$100,000-$139,999	0	0	0	3	0
$140,000 and over	0	0	0	0	0
Total	100%	100%	100%	100%	100%
Median	$45,000	$35,000	$35,000	$45,000	$37,000
Mean	$48,000	$41,000	$36,000	$47,000	$37,000
S.D.	$14,000	$ 7,000	$14,000	$18,000	$25,000
n physicians	(10)	(15)	(12)	(37)	(2)

TABLE 18 -- CONTINUED

Chi-square tests are not significant either for the four physician groups (excluding the small "Primary Care Support" group) or comparing only Primary Care Track graduates and general internists.

Note: Chi-square may not be valid due to small cells.

Source Question:

What was your income for 1980, from your professional work, after deducting office expenses but before deducting retirement contributions and taxes?

TABLE 19

Physician Income: Office Practice Only -- Solo and Group

Income (Office)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Under $20,000	3%	5%	4%	2%	9%
$20,000-$29,999	8	10	5	0	0
$30,000-$39,999	16	13	13	3	0
$40,000-$49,999	29	31	21	11	46
$50,000-$59,999	12	8	20	11	18
$60,000-$69,999	17	26	14	17	0
$70,000-$79,999	9	3	11	16	9
$80,000-$89,999	4	3	5	8	9
$90,000-$99,999	1	0	4	6	0
$100,000-$139,999	1	0	5	17	0
$140,000 and over	0	3	0	10	9
Total	100%	100%	100%	100%	100%
Median	$45,000	$45,000	$55,000	$75,000	$45,000
Mean	$50,000	$50,000	$58,000	$82,000	$59,000
S.D.	$18,000	$22,000	$24,000	$33,000	$32,000
n physicians	(138)	(39)	(111)	(133)	(11)

TABLE 19 -- CONTINUED

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=113.71 d.f.=30 p<.0001

2. Chi-square comparing Primary Care Track graduates and General Internists is not significant.

Note: Chi-square may not be valid due to small cells.

Source Question:

What was your income for 1980, from your professional work, after deducting office expenses but before deducting retirement contributions and taxes?

Section D. Some Measures of Access

Table 20 shows that all physician groupings are largely available for emergencies, with family physicians being especially available. Also, family physicians are most available at nonregular times.

Table 21 shows that office based physicians are more likely to maintain practices which are more conducive to patient needs and/or schedules.

Table 22 indicates that the patients of subspecialists are least likely and the patients of family physicians most likely to be self-referred.

Tables 23 and 24 show that subspecialists are likely to have admitting privileges at more hospitals than family physicians and general internists. Being office-based (Table 24) doesn't seem to decrease or increase the number of hospital admitting privileges across physician groups.

TABLE 20

Physician Availability (Access)

Availability	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Emergencies	89%	66%	66%	72%	.001	78%
Evening Hrs	22	28	16	6	.001	28
Sat. a.m. Hrs	60	18	20	13	.001	22
Other Weekend Hrs	8	4	6	1	.001	6
House Call(s)	49	29	28	12	.001	39
n physicians	(170)	(74)	(159)	(199)		(18)

*Based on chi-square test for the four physician groups (excluding the small "Primary Care Support" group). Chi-square comparing Primary Care Track graduates and general internists is not significant in all cases except in the "Evening Hrs" category. The result of the chi-square test in that case was the following: chi-square=5.10 d.f.=1 p<.0239.

Source Question:

In any of your practice arrangements, do you, yourself treat or have (Emergencies/Evening hours/Saturday A.M. Hours/Other Week end Hours/House Calls)?

TABLE 21

Access Measures: Office-Based Physicians Only

Availability (Office)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Emergencies	92%	76%	80%	81%	.013	91%
Evening Hrs	22	27	14	7	.001	27
Sat. a.m. Hrs	70	27	25	17	.001	27
Other Weekend Hrs	9	7	5	1	.024	9
House Call(s)	51	39	40	16	.001	45
n physicians	(138)	(41)	(111)	(136)		(11)

*Based on chi-square test for 4 physician groups (excluding the small "Primary Care Support" group). Chi-square comparing Primary Care Track graduates and general internists is not significant.

Note: Chi-square may not be valid due to small cells.

Source Question:

In any of your practice arrangements, do you, yourself treat or have (Emergencies/Evening hours/Saturday A.M. Hours/Other Week end Hours/House Calls)?

TABLE 22

Percentage of Patients Who Are Self Referred

	MEAN	N
Family Physician	81%	154
Primary Care Track Gen'l Internist	57%	72
General Internist	64%	155
Subspecialty Internist	30%	196
Primary Care Support	64%	18

Source Question:

In your main practice, what percentage of the new patients are self-referred---that is, not referred by another doctor or by an agency?

TABLE 23

Admitting Privileges: Number of Hospitals

Admitting Privileges	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
None	1%	1%	9%	2%	0%
One	57	51	50	30	41
Two	29	30	26	27	24
Three	7	16	11	25	35
Four or More	6	1	4	16	0
Total	100%	100%	100%	100%	100%
n physicians	(170)	(78)	(162)	(194)	(17)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=80.62 d.f.=12 p<.0001

2. Chi-square comparing Primary Care Track graduates and general internists is not significant.

Note: Chi-square may not be valid due to small cells.

Source Question:

At how many hospitals do you have admitting privileges?

TABLE 24

Admitting Privileges: Number of Hospitals (Office-Based Physicians Only)

Admitting Privileges	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
None	1%	2%	3%	0%	0%
One	57	35	50	26	36
Two	29	33	29	24	9
Three	6	28	12	30	55
Four or More	7	2	6	20	0
Total	100%	100%	100%	100%	100%
n physicians	(139)	(40)	(113)	(131)	(11)

Chi-Square Tests:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   chi-square=65.99 d.f.=12 p<.0001

2. Chi-square comparing Primary Care Track graduates and General Internists is not significant.

Source Question:

At how many hospitals do you have admitting privileges?

Section E. Physician Productivity Measures

Table 25 shows the higher participation in teaching and research of the primary care track graduates and the subspecialists. Subspecialty internists average five more work hours per week than the others, but less of their time is devoted to patients and more to teaching and research research. The above finding is further developed by looking at physicians who have the same major practice (i.e. office based - Table 26; academic - Table 27; and other institution based practitioners - Table 28). Overall, it is shown that subspecialists tend to work more hours per week than either general internists or family physicians with the extra time devoted largely to teaching and research.

Family physicians see the most outpatients per week and subspecialists have the largest number of inpatients and consultations (Tables 29-32). Office-based physicians (Table 30) see substantially more outpatients per week than do academic based physicians (Table 31) and slightly more outpatients per week than non-academic, institution-based physicians (Table 32). The face-to-face time with each patient increases from family physicians to general internists, and from general internists to subspecialists (Table 33).

TABLE 25

Distribution of Professional Work Time

(Hours per Week)

Work Distribution	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Patient Care	44	36	43	39	44
Teaching	3	6	3	6	4
Research	1	3	2	7	3
Administration	3	4	3	3	3
Other	1	2	1	2	1
Total Hours	52	51	52	57	55
n physicians	(168)	(79)	(165)	(210)	(18)

Analysis of Variance for unbalanced design:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   $F=11.77$ d.f.=3 $p<.0001$

2. The result of the test comparing Primary Care Track graduates and general internists is not significant.

Source Question:

How many hours of your total professional work time per week are spent in each of the following activities? (Exclude on-call hours)

TABLE 26

Professional Activities - Distribution of Work Time

(Office Based Physicians by Hours per Week)

Work Distribution (office)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Patient Care	48	45	50	49	53
Teaching	1	3	2	4	2
Research	0	1	0	1	0
Administration	2	3	2	3	1
Other	1	1	1	1	1
Total Hours	52	53	55	58	57
n physicians	(138)	(41)	(112)	(136)	(11)

Analysis of Variance for unbalanced design:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   $F=5.07$ d.f.=3 $p<.0020$

2. The result of the test comparing Primary Care Track graduates and general internists is not significant.

Source Question:

How many hours of your total professional work time per week are spent in each of the following activities? (Exclude on-call hours)

TABLE 27

Professional Activities - Distribution of Work Time

(Salaried Academic Physicians - Hours per Week)

Work Distribution (Academic)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Patient Care	13	18	18	18	20
Teaching	15	12	11	14	14
Research	7	11	19	21	9
Administration	13	7	4	5	13
Other	2	3	1	2	3
Total Hours	50	51	53	60	59
n physicians	(10)	(15)	(12)	(39)	(2)

Analysis of Variance for unbalanced design:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   $F=4.37$ d.f.=3 $p<.0071$

2. The result of the test comparing Primary Care Track graduates and general internists is not significant.

Source Question:

How many hours of your total professional work time per week are spent in each of the following activities? (Exclude on-call hours)

TABLE 28

Professional Activities - Distribution of Work Time

(Non-Academic Institutional Practices - By Hours per Week)

Work Distribution (non-acad.)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Patient Care	36	34	33	25	39
Teaching	4	6	5	10	2
Research	3	1	2	14	0
Administration	4	3	4	4	5
Other	2	2	2	2	1
Total Hours	49	46	46	55	47
n physicians	(22)	(19)	(34)	(28)	(4)

Analysis of Variance for unbalanced design:

1. For the four physician groups (excluding the small "Primary Care Support" group):
   $F=3.48$ d.f.=3 $p<.0186$

2. The result of the test comparing Primary Care Track graduates general internists is not significant.

Source Question:

How many hours of your total professional work time per week are spent in each of the following activities? (Exclude on-call hours)

TABLE 29

Patients per Week

Patients	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Outpat. Visits	103	56	70	40	.001	62
Inpat. (Number)	3	4	4	6	.001	7
Consultations: Inpatient	0	2	2	6	.001	2
Phone Calls (With patients & their families)	36	29	28	26	.015	35
n physicians	(173)	(77)	(161)	(204)		(17)

*Based on Analysis of Variance for unbalanced design for the four physician groups (excluding the small "Primary Care Support" group).

The result of the test comparing Primary Care Track graduates and "general internist" categories only is not significant, except the following variables: Outpat. Visits ($p<.0611$) and Consultations ($p<.0493$).

Source Question:

Please take a moment to consider a typical 7 day week and answer the following questions based on that week.

a. How many outpatient visits would you have during t[illegible] week?
b. How many inpatients do you have during the average week?
c. How many consultations do you answer in the hospital in a typical week?
d. How many telephone calls would you have with patients or their families during a typical week? Exclude patients cared for primarily by residents and fellows.

TABLE 30

Patients per Week: Office-Based Physicians

Patients (Academic)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Outpatient Visits	116	71	74	52	.001	74
Inpatient (Number)*	4	4	6	8	.001	7
Consultations: Inpatient	0	2	3	7	.001	2
Phone Calls (With patients & their families)	42	39	36	33	ns	54
n physicians	(137)	(41)	(109)	(135)		(10)

*Based on Analysis of Variance for unbalanced design for the four physician groups (excluding the small "Primary Care Support" group). Comparing Primary Care Track graduates and general internists the results are the following: Inpatients ($p<.083$), not significant for the other three categories.

Source Question:

Please take a moment to consider a typical 7 day week and answer the following questions based on that week.

a. How many outpatient visits would you have during the week?
b. How many inpatients do you have during the average week?
c. How many consultations do you answer in the hospital in a typical week?
d. How many telephone calls would you have with patients or their families during a typical week? Exclude patients cared for primarily by residents and fellows.

TABLE 31

Patients per Week: Salaried Academic Physicians

Number of Patients (academic)	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Outpatient Visits	22	19	12	15	ns	16
Inpatient (number)*	2	2	1	3	ns	3
Consultations: Inpatient	1	1	4	5	.075	3
Phone Calls (With patients & their families)	9	17	6	11	ns	11
n physicians	(10)	(14)	(12)	(36)		(2)

*Based on Analysis of Variance for unbalanced design for the four physician groups (excluding the small "Primary Care Support" group).

The result of the test comparing Primary Care Track graduates and general internists is not significant in all cases except "Phone Calls": F=3.18 d.f.=1 p<.0870.

Source Question:

Please take a moment to consider a typical 7 day week and answer the following questions based on that week.

a. How many outpatient visits would you have during the week?
b. How many inpatients do you have during the average week?
c. How many consultations do you answer in the hospital in a typical week?
d. How many telephone calls would you have with patients or their families during a typical week? Exclude patients cared for primarily by residents and fellows.

TABLE 32

Patients per Week: Non-Academic Institution-Based Physicians

Patients (non-acad.)	Primary Care Track Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	p*	Primary Care Support
Outpatient Visits	81	58	85	19	.001	83
Inpatient (Number)*	2	4	2	3	ns	14
Consultations: Inpatient	1	1	2	5	.005	2
Phone Calls (With patients & their families)	19	19	14	15	ns	35
n physicians	(21)	(19)	(33)	(27)		(4)

*Based on Analysis of Variance for unbalanced design. The result of the test comparing Primary Care Track graduates and general internists is not significant.

Source Question:

Please take a moment to consider a typical 7 day week and answer the following questions based on that week.

a. How many outpatient visits would you have during the week?
b. How many inpatients do you have during the average week?
c. How many consultations do you answer in the hospital in a typical week?
d. How many telephone calls would you have with patients or their families during a typical week? Exclude patients cared for primarily by residents and fellows.

TABLE 33

Mean Encounter Time by Care Classification - Outpatients Only

(in minutes)

Visit Minutes	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Principal (number)	15 (3043)	18 (747)	17 (1465)	18 (934)	17 (212)
Coordinated	15 (63)	17 (21)	15 (54)	17 (317)	20 (3)
Limited	15 (41)	12 (2)	20 (38)	16 (228)	0
Episodic	15 (320)	15 (68)	15 (136)	17 (72)	17 (9)
Consult	17 (140)	22 (71)	25 (139)	29 (476)	32 (24)
New Patient	17 (1074)	21 (356)	24 (516)	27 (274)	23 (70)
Total	15 (4749)	19 (1290)	19 (2365)	21 (2347)	19 (321)

Source Question:

How many minutes did you spend face-to-face with this patient on this visit?

CHAPTER TWO. PATIENT CHARACTERISTICS

Overview

In this section, the patient population is described. Demographic characteristics, medical conditions, patient functional abilities and patient/physician relationships are the subsections.

Section A. Patients' Demographic Characteristics

The patient populations of the physician groups differ. Family physicians treat a younger population than either general internists or subspecialists. The elderly comprise a higher proportion (Table 34) and a larger number seen per day (Table 35) of the patients of general intenists and subspecialists, compared to family physicians. General internists see a greater proportion of non-white patients than do family physicians or subspecialists (Table 36). Family physicians have patients which are generally better educated (Table 37). But this may be due to the fact that family physicians see a younger group of adult patients (Table 34).

Occupations of the patients are fairly well spread out among the different physician groupings (Table 38), but primary care internists have quite a higher percentage of "not-fully employed" patients than do subspecialists and general internists (Table 39). Internists and subspecialists have more retired patients -- which falls in line with the findings of Table 34. General internists usually have patients of lower income (Table 40), but this is not reflected through a higher proportion of patients using Medicaid or other public (non-Medicare) programs for payment (Table 41).

TABLE 34

Age Distribution of Patients

(Outpatients Only)

Patient Age	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
<16	27%	5%	4%	4%	6%
16-40	46	37	31	24	40
41-65	16	36	37	43	32
65 or over	11	22	28	29	22
Total	100%	100%	100%	100%	100%
n encounters	(6647)	(1473)	(2801)	(2680)	(359)

Chi-Square Test:

chi-square=2665.33 d.f.=12 p<.0001

Source Question:

Patient's Age:

TABLE 35

Average Number of People Aged 65 and Over Seen in a 3-Day Period

Patients	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Outpatients	6	6	7	6	6
Inpatients	2	4	4	5	4
Total	8	10	11	11	10
n encounters	(270)	(114)	(212)	(278)	(24)

Source Question:

The above numbers were generated from 3 days of inpatient/outpatient encounters.

TABLE 36

Patients' Race or Ethnicity

Ethnicity	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
White	91%	79%	81%	86%	75%
Black	3	15	11	9	13
Hispanic	2	4	4	3	2
Asian	1	3	3	1	0
American Indian	2	0	1	1	9
n encounters	(6593)	(457)	(2789)	(2660)	(356)

Chi-Square Test:

chi-square=699.40 d.f.=16 p<.0001

Source Question (from the Outpatient Encounter Form):

Patient's Race or Ethnicity:

TABLE 37

Patients' Educational Level

(Outpatients, Ages 16 and Above)

Educational Level	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Less than High School Graduation	20%	29%	33	35%	13%
HS Graduate Some College	58	48	48	46	50
Coll. Graduate Some Post Graduate	23	23	19	19	38
Total	100%	100%	100%	100%	100%
n patients	(217)	(91)	(200)	(259)	(16)

Chi-Square Test:

chi-square=18.73 d.f.=8 p<.0164

Source Question:

What was the highest level you completed in school?

TABLE 38

Patients' Occupations

(Male Outpatients, Ages 16 and Above)

Patient Occupation	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Clerical	2%	6%	8%	3%	17%
Farmer	7	0	2	3	0
Administrative	12	12	19	17	17
Sales	12	6	6	6	0
Skilled	10	25	28	26	17
Prof/Technician	24	22	14	19	0
Operator	22	3	5	8	17
Protect	2	12	5	4	0
Labor	10	3	8	9	0
Service	0	9	6	6	33
Total	100%	100%	100%	100%	100%
n patient	(59)	(32)	(64)	(108)	(6)

TABLE 38 -- CONTINUED

Chi-Square Test:

chi-square=54.79 d.f.=36 p<.0232

Note: Table is so sparse that chi-square may not be valid.

Source Question:

The U.S. Census divides jobs into ten groups according to the kind of work people do. Here is a list of job categories and examples of each. Please read the list carefully and circle the number of the category which comes closest to describing your job. If you have more than one job, answer about your main job. If you are unemployed, laid off, looking for work, or retired, answer about the last job you had.

TABLE 39

Patients' Employment Status

(Male Outpatients, Ages 16 and Above)

Employment Status	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Full-time	70%	46%	58%	67%	67%
Part-time	3	4	3	5	0
Unemployed/ other	10	23	6	2	17
In School	1	4	0	0	0
Retired	15	23	34	26	17
Total	100%	100%	100%	100%	100%
n patient	(98)	(26)	(71)	(87)	(6)

Chi-Square Test:

chi-square=27.04 d.f.=16 p<.0410

Note: Table is so sparse that chi-square may not be valid.

Source Question:

Last week, were you: working full-time, working part-time, etc.

TABLE 40

Patients' Family Income

(Outpatients, Ages 16 and Above)

Patient's Family Income	Primary Care Track: Family Physician	Primary Care Track: General Internist	General Internist	Subspec. Internist	Primary Care Support
<$6,000	19%	15%	18%	20%	12%
$6,000-$10,000	9	17	12	11	31
$10,000-$15,000	14	22	21	11	6
$15,000-$20.000	15	11	9	13	19
$20,000-$25,000	16	13	16	15	12
>$25,000	26	21	23	31	19
Total	100%	100%	100%	100%	100%
n patients	(201)	(89)	(184)	(246)	(16)

Chi -Square Test:

chi-square=29.58 d.f.=20 p<.0770

Source Question:

Which of the following categories best describes your total family income from all sources--before taxes--for the 1980?

TABLE 41

Major Source of Payment Expected

(Outpatients, Ages 64 and under)

Payment Source	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Patient/Family	37%	35%	38%	33%	47%
Private Insurance	34	26	26	39	12
Medicare	1	2	2	5	2
Medicaid/Public	10	11	11	8	5
Prepaid Plan	13	16	11	7	18
Military/VA	2	5	6	5	7
Other	3	5	6	4	9
Total	100%	100%	100%	100%	100%
n encounters	(5854)	(1111)	(1985)	(1871)	(281)

Source Question:

Expected major source of payment for visit:

Section B. Patients' Medical Conditions

The most frequent major diagnosis of family practice outpatients is the category "Injury and Poisoning" (Table 42). The family physician's hospital practice is weighted toward normal delivery and neonatal care, while both the inpatients and outpatients of the general internist are most frequently being treated for circulatory disorders.

Some of the differences in major diagnosis might reflect the pediatric segment of a family physician's practice: injury and preventive medicine (such as vaccination) are more commonly mentioned as the major focus of the visit by the family physicians than by the general internists. Tables 44 and 45 for patients over age 16 show no appreciable difference from their respective findings in Tables 42 and 43.

TABLE 42

Major Diagnosis Addressed: Outpatients

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Infectious and Parasitic Diseases	4%	4%	3%	2%	3%
Neoplasms	1	1	2	10	1
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	2	5	7	4	7
Diseases of the Blood and Blood-Forming Organs	0	1	1	1	1
Mental Disorders	2	4	4	1	5
Diseases of the Nervous System and the Sense Organs	6	3	3	1	4
Diseases of the Circulatory System	7	18	23	20	18
Diseases of the Respiratory System	3	12	12	12	12
Diseases of the Digestive System	4	6	6	9	6
Diseases of the Genitourinary System	6	5	4	4	7
Complications of Pregnancy, Childbirth, and the Puerperium	1	0	0	0	0

TABLE 42 -- CONTINUED

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Diseases of the Skin and Subcutaneous Tissue	5	4	3	1	4
Diseases of the Musculoskeletal System and Connective Tissue	6	9	9	20	8
Congenital Anomalies	0	0	0	0	0
Certain Conditions Originating in the Perinatal Period	0	0	0	0	0
Symptoms, Signs, and Ill-Defined Conditions	9	14	14	11	11
Injury and Poisoning	11	6	4	2	6
Surgical After Care	2	0	0	0	1
Counseling	1	1	0	0	2
General Medical Exam	5	4	5	1	4
Preventive Care	6	1	0	0	1
Normal Pregnancy, Delivery, or Neonatal Care	9	0	0	0	0
Total	100%	100%	100%	100%	100%
n encounters	(6567)	(1411)	(2782)	(2559)	(321)

Source Question:

Major diagnosis or problem addressed this visit - diagnosis coded according to ICD9 coding definitions by a certified medical coder.

TABLE 43

Major Diagnosis Addressed: Inpatients

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Infectious and Parasitic Diseases	2%	2%	2%	2%	4%
Neoplasms	5	8	9	13	15
Endocrine, Nutritional, and Metabolic Disease and Immunity Disorders	2	3	5	2	5
Diseases of the Blood and Blood-Forming Organs	1	1	1	2	4
Mental Disorders	2	5	6	2	8
Diseases of the Nervous System and the Sense Organs	1	6	3	1	2
Diseases of the Circulatory System	10	25	24	19	24
Diseases of the Respiratory System	7	8	6	12	1
Diseases of the Digestive System	11	14	11	14	8
Diseases of the Genitourinary System	5	5	4	6	5
Complications of Pregnancy, Childbirth, and the Puerperium	6	0	0	0	0

TABLE 43 -- CONTINUED

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Diseases of the Skin and Subcutaneous Tissue	3	1	3	1	2
Diseases of the Musculoskeletal System and Connective Tissue	4	4	5	5	8
Congenital Anomalies	0	0	0	0	0
Certain Conditions Originating in the Perinatal Period	1	0	0	0	0
Symptoms, Signs, and Ill-Defined Conditions	9	10	13	16	9
Injury and Poisoning	9	7	7	4	6
Surgical After Care	1	1	1	0	0
Counseling	0	0	0	0	0
General Medical Exam	0	0	0	0	0
Preventive Care	3	0	0	0	0
Normal Pregnancy, Delivery, or Neonatal Care	19	0	0	0	0
Total	100%	100%	100%	100%	100%
n encounters	(625)	(346)	(798)	(1297)	(80)

Source Question:

Major diagnosis or problem addressed this visit - diagnosis coded according to ICD9 coding definitions by a certified medical coder.

TABLE 44

Major Diagnosis Addressed: Outpatients, Ages 16 and Above

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Infectious and Parasitic Diseases	3%	4%	3%	2%	3%
Neoplasms	1	1	2	10	1
Endocrine, Nutritional, and Metabolic Disease and Immunity Disorders	3	6	7	4	7
Diseases of the Blood and Blood-Forming Organs	0	1	1	1	1
Mental Disorders	3	5	4	1	5
Diseases of the Nervous System and the Sense Organs	4	3	3	1	3
Diseases of the Circulatory System	9	19	23	20	19
Diseases of the Respiratory System	10	11	12	12	11
Diseases of the Digestive System	4	6	6	9	6
Diseases of the Genitourinary System	8	5	4	4	8
Complications of Pregnancy, Childbirth, and the Puerperium	1	0	0	0	0

TABLE 44 -- CONTINUED

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Diseases of the Skin and Subcutaneous Tissue	5	4	3	1	5
Diseases of the Musculoskeletal System and Connective Tissue	8	9	9	20	8
Congenital Anomalies	0	0	0	0	0
Certain Conditions Originating in the Perinatal Period	0	0	0	0	0
Symptoms, Signs, and Ill-Defined Conditions	9	15	13	11	12
Injury and Poisoning	11	6	4	2	6
Surgical After Care	2	1	0	0	0
Counseling	1	1	0	0	2
General Medical Exam	4	5	5	1	4
Preventive Care	2	1	0	0	1
Normal Pregnancy, Delivery, or Neonatal Care	12	0	0	0	0
Total	100%	100%	100%	100%	100%
n encounters	(4813)	(1342)	(2685)	(2459)	(304)

Source Question:

Major diagnosis or problem addressed this visit - diagnosis coded according to ICD9 coding definitions by a certified medical coder.

TABLE 45

Major Diagnosis Addressed: Inpatients, Ages 16 and Above

Diagnosis	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Infectious and Parasitic Diseases	2%	2%	2%	2%	4%
Neoplasms	6	7	9	13	16
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	2	3	5	2	3
Diseases of the Blood and Blood-Forming Organs	1	1	1	2	4
Mental Disorders	3	5	6	2	5
Diseases of the Nervous System and the Sense Organs	1	7	3	1	3
Diseases of the Circulatory System	13	26	25	19	26
Diseases of the Respiratory System	6	8	6	12	1
Diseases of the Digestive System	12	14	12	14	8
Diseases of the Genitourinary System	6	5	4	6	5
Complications of Pregnancy, Childbirth, and the Puerperium	7	0	0	0	0

TABLE 45 -- CONTINUED

Diagnosis	Primary Care Track: Family Physician	General Internist	General Internist	Subspec. Internist	Primary Care Support
Diseases of the Skin and Subcutaneous Tissue	3	1	3	1	3
Diseases of the Musculoskeletal System and Connective Tissue	4	4	5	5	8
Congenital Anomalies	0	0	0	0	0
Certain Conditions Originating in the Perinatal Period	0	0	0	0	0
Symptoms, Signs, and Ill-Defined Conditions	9	11	12	15	8
Injury and Poisoning	11	7	7	4	5
Surgical After Care	1	1	1	0	0
Counseling	0	0	0	0	0
General Medical Exam	0	0	0	0	0
Preventive Care	0	0	0	0	0
Normal Pregnancy, Delivery, or Neonatal Care	11	0	0	0	0
Total	100%	100%	100%	100%	100%
n encounters	(473)	(329)	(767)	(1255)	(74)

Source Question:

Major diagnosis or problem addressed this visit - diagnosis coded according to ICD9 coding definitions by a certified medical coder.

Section C. Patients' Functional Ability or Disability

The main differences among the groups in the patient populations served are in the patients' overall functional status, as demonstrated in Tables 46 through 47. Family physicians care for a physically stronger and more self-reliant group. Note is made, however, of the proportionately large number of younger patients in the 16-40 age group in the practices of family physicians compared to general internists and subspecialty internists even when only patients aged 16 and over are enumerated (63% vs. 34% vs. 24%). General internists care for a less able group, and subspecialty internists have a patient population which is at a lower level of physical functioning, compared to the other two groups. Considering only male patients aged 16 and older, 70% who are cared for by family physicians are employed full-time, compared to 58% of those cared for by general internists. There is close agreement between patient-provided and physician-provided information relative to the patients' normal functional ability (Table 48): between 73% and 85% were within one point of agreement on a six point scale.

TABLE 46

Patient's Functional Status

(Outpatients, Ages 16 and Above)

Patients Functional Status	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Question A (number)	0% (211)	3% (92)	3% (191)	5% (258)	0% (17)
Question B (n)	8 (211)	17 (92)	20 (190)	37 (254)	12 (38)
Question C (n)	15 (213)	33 (92)	31 (191)	47 (255)	24 (17)
Question D (n)	34 (213)	50 (92)	38 (191)	62 (255)	29 (17)

A Do you need help eating, dressing, bathing or using the toilet?

B Does your health keep you from working at a job, doing work around the house or going to school?

C Are you unable to do certain kinds of work, housework or schoolwork because of your health?

D Are you unable to do hard activities at home like scrubbing floors or moving heavy furniture?

Source Question:

Can you usually do each activity without help from others?

TABLE 47

Patients' Functional Capacity - Physician Provided Information

(Outpatients, Age 16 and above)

Patients Functional Capacity	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Run 1 Mile	38%	25%	21%	15%	29%
Run 50 Yards	27	24	22	18	27
Climb Stairs (2 flights)	18	25	25	27	22
Walk 4 Blocks	8	11	15	20	9
Walk 1 Block	5	10	11	14	9
Housebound	4	5	6	6	4
Total	100%	100%	100%	100%	100%
n encounters	(4827)	(1330)	(2676)	(2517)	(335)

Chi-Square Test:

chi-square=920.29 d.f.=20 p<.0001

Source Question:

Which is the most strenuous activity this patient can usually perform unassisted?

TABLE 48

Patients' Functional Capacity:

Agreement Between Patient and Physician Provided Information

(Outpatients-Ages 16 and Above)

Patients' Judgment	Run 1 Mile	Run 50 yds	Climb Stairs	Walk 4 Blocks	Walk 1 Block	House-bound	Total
Run 1 Mile	59%	21%	8%	5%	1%	5%	22% (169)
Run 50 yds	32	35	18	16	3	0	22 (176)
Climb Stairs	6	17	32	31	17	5	20 (156)
Walk 4 Blocks	2	24	34	31	24	5	22 (173)
Walk 1 Block	0	2	7	12	41	30	10 (75)
Housebound	1	1	2	6	13	55	5 (37)
Total	100%	100%	100%	100%	100%	100%	100%
n patients	(188)	(161)	(206)	(121)	(90)	(20)	(786)
Column %	24%	20%	26%	15%	11%	3%	100%

Source Question:

A comparison between patient and physician answers regarding patients' functional capacity -- Which is the most strenuous activity you (this patient) can usually perform unassisted?

Section D. Patient/Physician Relationships

The patient encounter classification scheme was described in Figure A (page 20). Tables 49 through 52 provide breakdowns of the six encounter types by physician group. As the tables show, the physician specialty groups differ in the distribution of patient encounters. As one would expect, family physicians have the highest proportion of Principal Care encounters -- 65% of all outpatient encounters (Table 49) and 64% of all inpatient encounters (Table 51) -- while subspecialists' encounters are least often defined as Principal Care relationships: 42% of outpatient encounters and 16% of inpatient encounters are in the Principal Care category. Subspecialists' encounters fall more often than the other groups into the categories Coordinated, Limited, and Consult. Both subspecialists and general internists conduct more consults in the hospital than they do in ambulatory care settings. In contrast, the distribution of inpatient compared to outpatient encounters of family physicians appear similar.

Tables 53 and 54 show that the differences in the distribution of encounter types among physician groups seem more pronounced than the differences among practice types within groups. Family physicians have proportionately more Principal Care encounters in all practice settings, and fewer consultations. Subspecialists have the lowest percentage of Principal Care encounters and the most consultations. For general internists, however, setting is significant: those in academic or institutional settings conduct more consults and provide less Principal Care.

TABLE 49

Care Classification: Outpatients

(Encounter-Based Percentages)

Care Classification	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Principal	65%	57%	62%	42%	65%
Coordinated	1	2	3	14	1
Limited	1	0	2	10	0
Episodic	8	6	6	3	3
Consult	3	5	6	19	8
New Patient	22	30	22	12	24
Total	100%	100%	100%	100%	100%
n encounters	(6544)	1441)	(2780)	(2629)	(356)

Chi-Square Test:

chi-square=2667.55 d.f.=20 p<.0001

Source Question:

For care classification category definitions refer to Figure A, page 20.

TABLE 50

Care Classification: Outpatients

(Mean Percent per Physician)

Care Classification	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Principal	64%	58%	60%	35%	61%
Coordinated	1	2	3	17	1
Limited	1	0	1	10	0
Episodic	8	6	5	3	2
Consult	3	6	6	24	11
New Patient	23	29	23	10	25
Total	100%	100%	100%	100%	100%
n physicians	(148)	(63)	(113)	(146)	(13)

Source Question:

For care classification category definitions refer to Figure A, page 20.

TABLE 51

Care Classification: Inpatients

(Encounter-Based Percentages)

Care Classification	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Principal	64%	33%	34%	16%	27%
Coordinated	1	1	2	4	0
Limited	1	0	1	2	0
Episodic	7	5	5	5	4
Consult	10	32	37	63	58
New Patient	18	29	21	9	10
Total	100%	100%	100%	100%	100%
n physicians	(520)	(298)	(726)	(1262)	(77)

Chi-Square Test:

chi-square=664.02 d.f.=20 p<.0001

Source Question:

For care classification category definitions refer to Figure A, page 20.

TABLE 52

Care Classification: Inpatients

(Mean Percent per Physician)

Care Classification	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Principal	68%	36%	37%	17%	31%
Coordinated	0	1	1	4	0
Limited	0	0	0	2	0
Episodic	7	6	6	4	7
Consult	7	35	40	64	51
New Patient	17	22	16	8	12
Total	100%	100%	100%	100%	100%
n physicians	(120)	(51)	(97)	(132)	(11)

Source Question:

For care classification category definitions refer to Figure A, page 20.

TABLE 53

Percentage of All Encounters Which Are Principal Care

Principal Care	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Solo Practice	66%	62%	55%	37%	45%
Group Practice	64	56	59	29	66
Academic Position	68	61	37	14	33
Other Institution	66	32	34	33	5
n physicians	(149)	(64)	(116)	(154)	(13)

Source Question:

For principal care category definition refer to Figure A, page 20.

TABLE 54

Percentage of All Encounters Which Are Consults

Consults	Family Physician	Primary Care Track General Internist	General Internist	Subspec. Internist	Primary Care Support
Solo Practice	4%	7%	11%	36%	34%
Group Practice	3	12	13	38	16
Academic Position	4	15	32	49	67
Other Institution	8	12	32	29	14
n physicians	(149)	(64)	(116)	(154)	(13)

Source Question:

For consults category definition refer to Figure A, page 20.

CHAPTER THREE. TRAINING AND PRACTICE

Overview

Internal medicine residency training programs are noted by their heterogeneity (13). In this section, the elements of internal medicine residency training which are thought to prepare the future internist for primary care patient relationships are explored. The career orientations of departments in which residency training is based and the types of primary care and ambulatory care training provided are described, and departments with primary care tracks are compared with other departments in their provision of primary care training.

A comparison of the practice characteristics of general internists who had different types of training provides a very rough indication of the success of primary care training strategies, and a starting point for a more complete analysis of the relationship between residency training and future practice. Therefore, the 1976-1977 training program characteristics, as reported by the training program directors in a 1976 study, are evaluated in light of the 1981 activities of internists who were residents in these programs in 1976-1977.

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13. Weil PA, Schleiter MK: National Study of Internal Medicine Manpower: VI. Factors predicting preferences of residents for careers in primary care or subspecialty care and clinical practice or academic medicine. Ann Intern Med 1981;94:691-703.

Section A. Orientation of the Program

Each department provides a training environment in which particular professional roles within internal medicine may predominate. The socialization of residents takes place in a context which does not offer a complete view of the range of internal medicine practice, but rather is skewed towards some segment of the profession. The training emphasis of a program may be expressed in admission criteria, the program director's goals for the residents' future careers, residents' descriptions of the program and the characteristics of faculty.

Table 55 describes characteristics of the training program which may contribute to this overall orientation. Panel A shows the ranking of admission criteria by 1976-1977 programs. It appears that the primary care tracks were based in internal medicine programs which were oriented more towards academic achievement than personality characteristics in their selection of residents, compared to residency programs in general. Panel B supports the argument that the directors of residency training programs which had primary care tracks intended more of their residents to enter academic careers than the directors of other internal medicine residency programs. Panel C shows that 51% of the faculty in departments with primary care tracks were full-time, compared to 33% of the faculty in other programs. Differences in the distribution of faculty characteristics may make a difference in the predominant role models available to residents.

In programs with primary care tracks, residents spent proportionately more of their ambulatory care experience in the general medicine clinic and less time in subspecialty clinics than programs in general (Panel D). In 57% of the programs with

primary care tracks, residents were organized into practice groups for ambulatory training, compared to 38% of all other programs (Panel E). Programs with primary care tracks were more likely than others to offer offsite ambulatory care training, in either physicians' private offices or at offsite clinics (Panel E).

Panel F shows that the departmental environment in which the primary care tracks were based were, in the view of residents, environments which encouraged academic and subspecialty careers to a greater degree, and careers in primary care practice to a lesser degree than other internal medicine residency programs. Programs differ in the number of non-internal medicine clinics used for the training of internal medicine residents. However, the programs with primary care tracks did not differ from other programs in the number of non-internal medicine specialties in which residents were trained: both groups averaged two non-internal medicine specialties used in ambulatory care training (not in the Table).

In summary, Table 55 shows that, although primary care tracks undoubtedly encouraged careers in general internal medicine ambulatory care, the departmental environments in which they were located had subspecialist and academic orientations towards internal medicine careers. Thus, the primary care training activities took place within a milieu which emphasized subspecialization and academic careers.

The ambulatory care training provided in programs with primary care tracks was different from the norm for internal medicine residency programs. Ambulatory training in General Internal Medicine clinics was more common, training in subspecialty clinics less common, ambulatory training was usually in a group practice format, and most primary care track programs offered off-site training in physicians' private offices or neighborhood clinics.

This section does not deal specifically with the primary care track residency training programs in internal medicine. Rather, all residency training in internal medicine is analyzed as a unit.

TABLE 55

Characteristics of Departments in Which Primary Care Tracks Are Based Compared to Others

(The information in this table refers to General Internal Medicine)

A. TRAINING PROGRAM ADMISSION CRITERIA

	Programs with Primary Tracks	All Others	All Programs
GPA* > Personality (number)	43% (10)	29% (115)	30% (125)
GPA = Personality	39 (9)	35 (139)	35 (148)
Personality > GPA	17 (4)	36 (141)	35 (145)
Total	100%	100%	100%
n Programs	(23)	(395)	(418)

p (t-test) < .06

*GPA = Grade Point Average in medical school.

Source Question Part A (from the 1976 study):

A contructed variable from - For each of the following criteria, indicate the extent to which it is a factor in the admission of Residents to your Resident training program.

TABLE 55 -- CONTINUED

B. PROGRAM DIRECTORS' GOALS

	Programs with Primary Tracks	All Others	All Programs
Full-Time Research	6%	2%	3%
Teaching and Research	19	9	10
Practice and Teaching	31	34	34
Full-Time Practice	37	51	50
Administration	3	2	2
Public Health	4	2	2
Other	1	0	0
Total	100%	100%	100%
n Programs	(23)	(381)	(404)

$p < .001$

Source Question Part B (from the 1976 study):

In your opinion, over a 5 year-period, what percentage of all of your program graduates should optimally go into each of the following careers?

TABLE 55 -- CONTINUED

C. TYPE OF FACULTY

	Programs with Primary Tracks	All Others	All Programs
Strict Full Time	34%	23%	24%
Geographic Full Time	17	10	11
Part-Time Salaried	6	11	11
Voluntary	43	55	54
Total	100%	100%	100%
n Programs	(21)	(375)	(396)

Source Question Part C (from the 1976 study):

We are interested in learning more about the teaching manpower (faculty and attendings) used by Departments of Medicine. Please specify (a.) the total number of faculty and attending physicians whose salaries and appointments are managed through the Department(s) of Medicine, and (b.) how many of those are not involved with the Resident training program?

TABLE 55 -- CONTINUED

D. DISTRIBUTION OF INTERNAL MEDICINE AMBULATORY CARE TRAINING

	Programs with Primary Tracks	All Others	All Programs
General Internal Medicine	80%	67%	67%
Subspecialty Clinics	20	33	33
Total	100%	100%	100%
n Programs	(21)	(362)	(383)

Source Question Part D (from the 1976 study):

Of the time a Resident spends in Ambulatory Care, what percentage does he spend in the General Medicine clinic and what percentage in the subspecialty clinics?

TABLE 55 -- CONTINUED

E. AMBULATORY CARE TRAINING

	Programs with Primary Tracks	All Others	All Programs
Percent of residents' time in ambulatory training.	17% (23)	14% (386)	15% (409)
Ambulatory training organized into practice groups	57% (23)	38% (372)	38% (395)
Offsite training offered	59% (22)	44% (369)	45% (391)

Source Question Part E (from the 1976 study):

During the course of a year, what percentage of the average resident's time is spent in each of the following services....

For the purpose of General Medicine Ambulatory Care training, are Residents in any year organized into discrete groups in which Residents participate with the same group of physicians on a continuing basis, much the same as in a group practice?

TABLE 55 -- CONTINUED

F. RESIDENTS' PERCEPTION OF PROGRAM ORIENTATION

	Programs with Primary Tracks	All Others	All Programs
Teacher/Researcher	29%	7%	9%
Primary Practitioner	16	59	55
Subspecialist	53	33	34
Other	2	2	2
Total	100%	100%	100%
n Residents	(49)	(470)	(519)

Chi-Square Test:

chi-square = 41.9 d.f.=2 $p < .001$

Source Question Part F (from the 1976 study):

Please circle the code for the type of career that is most encouraged by the residency program and its faculty.

Section B. Relations Between Training and Practice Characteristics

In this section, the relationship between training program characteristics and practice is explored. As an example of this, the bivariate correlations between certain characteristics of training which are thought to influence one's experience of primary care and the rate of subspecialization are observed. The general institutional characteristics of the training program have already been shown to be correlated with the intention to subspecialize (14).

Residency training characteristics which are generally considered to be related to the provision of primary care include: the amount of ambulatory training, the amount of training in the general medicine clinics, the amount of training in other specialties, such as gynecology, psychiatry, neurology, orthopedics and others, the organization of training into practice groups, and offsite ambulatory experiences. In addition to training experiences, the institutional context of training (size/complexity) and the resident's personal characteristics have important effects which should also be measured.

Four practice characteristics are assessed in relation to prior training experiences in Tables 56 through 59. The practice characteristics are: general internal medicine versus a subspecialty; time spent in patient care, teaching and research; number of contacts with patients per week; and characteristics of the practice which might make the physician more accessible to patients.

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14. Weil PA, Schleiter MK, Tarlov AR National Study of Internal Medicine Manpower: VI. Factors Predicting Preferences of Residents for Careers in Primary Care or Subspecialty Care and Clinical Practice or Academic Medicine, Ann Intern Med 1981;94:691-703.

The rate of subspecialization of trainees did not relate strongly to residency training characteristics thought to be associated with primary care (Table 56).

Table 57 shows that the practicing internists' relative emphasis on research is negatively associated with time spent in patient care during training. The internists' time spent teaching was not associated with time spent in patient care during training. The amount of time spent in patient care by the practicing internist was positively associated with time spent in general internal medicine clinics and group practice modules during training.

Table 58 shows that the number of outpatient visits, inpatients, consults and telephone calls were all naturally associated with more patient care. The explicit high correlations between the above four groupings of this table show no illogical results.

Table 59 indicates that non-routine office hours (i.e. emergencies, evenings, week ends and house calls) are neutrally correlated with patient care. House calls are slightly positively related to patient care and Saturday p.m. or Sunday office hours are negatively associated. There are other large correlations and an overall high variance which may be of interest in this table.

TABLE 56

Subspecialization in Practice by Prior Training Characteristics

Residency Program Characteristics	General I.M.	Subspecialty	P	Test
a. % of time in Ambul. Care	14.7%	14.9%	ns	t-test
b. % of time in General IM Clinics	10.1%	10.4%	ns	t-test
c. # of Non-IM Specialties	5	4	.018	t-test
d. Practice Groups	42%	43%	ns	chi-square
e. Offsite Training	46%	34%	.004	chi-square

Source Question:

a. During the course of a year, what percentage of the average resident's time is spent in each of the following services?

b. From Part D, Table 55

c. Which of the following categories best describes the manner in which Residents obtain formal instruction?

d. Are Residents organized into discrete practice groups in which Residents participate with the same group of physicians on a continuing basis, much the same as in group practice?

e. How many of your Residents receive part of their ambulatory training away from the teaching hospital at the following locations?

TABLE 57

Professional Activities by Training Characteristics

Residency Program Characteristics	(Correlation Coefficients) Patient Care	Teaching	Research
a. % Time in Ambulatory Care	.02	.02	.00
b. % Time in General IM Clinics	.05	.00	-.15*
c. Non-IM Ambulance Training	-.05	.04	-.08
d. Practice Groups	.10	-.03	-.15*
e. Offsite Training	.02	-.01	-.15
f. Size/Complexity	.06	-.09	-.19*

*Statistically significant at the .05 level.

Professional Activities - How many hours of your total professional work time per week are spent in each of the following activities?

a. On the average, what percentage of a Resident's General Medicine ambulatory care patients receive longitudinal year-long care from that Resident when they return to the General Medicine Ambulatory Care Clinic or are admitted as inpatients on the General Medicine service?

b. On the average, what percentage of a Resident's General Medicine inpatients receive longitudinal year long care from that Resident after being discharged if they later come to the General Medicine Ambulatory Care Clinic or are readmitted to the General Medicine inpatient service?

c. Constructed variable - National Study of Internal Medicine Manpower: II. A Typology of Residency Training Programs in Internal Medicine, Annals of Internal Medicine, vol. 89, no. 5, November 1978.

d. Dichotomous variable - see Table 55, part e.

e. See Table 55, part f.

f. Constructed variable from - National Study of Internal Medicine Manpower: II. A Typology of Residency Training Programs in Internal Medicine, Annals of Internal Medicine, vol. 89, no. 5, November 1978.

TABLE 58

Patient Contacts by Training Characteristics: Correlation Coefficients

(Number of Contacts with Patients per Week)

Residency Program Characteristics	Outpatient Visits	Inpatients	Consults	Telephone Calls
a. % Time in Ambulatory Care	.01	-.07	.04	.09
b. % Time in Gen. IM Clinics	.04	.20*	.10	.01
c. Non-IM Ambulance Training	-.01	.08	.02	.07
d. Practice Groups	.11	.00	.20*	-.01
e. Offsite Training	.14	.06	-.01	.14
f. Size/Complexity	.16*	.19*	.00	.02

*Statistically significant at the .05 level.

Source Question:

Please take a moment to consider a typical 7 day week and answer the following questions based on that week.

a. How many outpatient visits would you have during the week?
b. How many inpatients do you have during the average week?
c. How many consultations do you answer in the hospital in a typical week?
d. How many telephone calls would you have with patients or their families during a typical week? Exclude patients cared for primarily by residents and fellows.

For Parts a,b,c,d,e,f see Table 57.

TABLE 59

Access Measures by Training Characteristics: Correlation Coefficients

(Access Measures: Office Hours)

Residency Program Characteristics	Emergencies After Hours	Eves and Sat. AM	Sat. PM or Sun.	House Calls
% Time in Ambulatory Care	-.05	-.21*	-.08	.12
% Time in Gen. IM Clinics	-.13	.09	.05	.08
Non-IM Ambulance Training	.17*	-.01	-.17*	.02
Practice Groups	-.02	-.04	-.09	.02
Offsite Training	.10	-.10	-.19*	.09
Size/Complexity	.13	-.08	-.11	.01

*Statistically significant at the .05 level.

Source Question:

Access Measures - In any of your practice arrangements, do you, yourself see emergencies after hours, etc.

Section C. Career Path Analysis

In this section, the career intentions and career values of the 1976-1977 internal medicine residents are compared with their 1981 practices and career values (Primary care track residents are not dealt with specifically in this section). An attempt will be made to assess and to explain differences between 1977 career expectations and 1981 actual career.

In 1976-1977, 107 (19%) of the internal medicine residents in the sample expressed the expectation of an academic career. In 1981, 61 of those 107 physicians held full-time academic positions (Table 60). These 61 current academicians have been joined by 48 other internists who had expressed other career goals in 1977 but have become full-time academic internists in 1981. Thus, nearly the same number, 109, and percentage, 19%, have become academic internists by 1981, but 44% of them underwent a career switch in the four-year interval.

A first step in attempting to understand the academic versus other career outcome is to describe the characteristics of: those who, in 1977, expected an academic career but who, in 1981, were in another professional mode; those whose 1981 career was consistent with their 1977 expectations for academic versus other; and those who entered academic positions despite opposite career expectations in 1977. A characterization of these three groups provides a starting point for studying the process by which young physicians choose academic careers.

The decision to pursue an academic career is a function of many factors, including difficult-to-measure personal and background characteristics which either facilitate or handicap socialization into a particular career path. Not only technical ability and scientific creativity, but also social sophistication relative

to the predominant social group from which the occupation primarily recruits and the compatibility of personal values and norms with the rewards and goals of the position play a part in this. How well the individual fits the informal stereotypes of the occupational group also influences their selection. Finally, the role of opportunity should be identified. One's institutional relationships are a component of opportunity in the recruitment/selection process, since institutional membership can be a basis for both weak ties and more formal recruitment and support networks. Therefore, career outcome is not a direct result of either personal choice or impersonal competition, but it is, rather, an indirect consequence of a broad series of social processes.

Table 61 shows that the demographic categories which seemed to have a positive influence on one's ability to attain a full-time academic position by 1981 include men, Protestants, Jewish physicians and USMGs. The results regarding fulfillment of 1976 expectations are not too much different when looking at 1976 private practice aspirations (Table 62). In this table, the categories of men, Jewish physicians, USMGs and residency types I and II seem to have an influence on whether one fulfills their 1976 expectations.

Tables 63 and 64 shows that the ranking of different career values may influence practice characteristics. Private practice is correlated with more interest in characteristics of the local community. Academic practice is associated with less concern with the local community and more attention to professional issues which are national or international, but specialized, in scope. The career values which correspond to a local and client-centered professional orientation are different from those which would correspond to a cosmopolitan and colleague-centered orientation.

Table 65 shows correlates of the academic versus practice career choice. These correlates give a hint of what factors are primarily personal motivators and what factors facilitate entrance or active recruitment into a particular segment of the profession. If the correlation coefficient for 1977 expectation is higher than the coefficient for 1981 career, one might guess that the variable operates to motivate the person towards an academic career. If the correlate for 1981 career is greater than the correlate for 1977 expectation, one could guess that the variable operates to facilitate entrance into that segment of the profession rather than motivate the individual to seek it. If both correlation coefficients are significant and about equal, one might guess that the variable both motivates and facilitates selection.

According to this logic, FMGs, compared to USMGs, may be highly motivated to enter academic careers but USMGs may have greater opportunity for entrance into academic positions. A Jewish family background, a high MCAT Score and plans to subspecialize are all factors which motivate one toward academic careers. Attendance at a college with high resources, a medical school with a research orientation or a residency training program with an academic rather than a practice orientation may provide both motivation and facilitate entry into an academic career. Being female may limit the opportunity for an academic career for FMGs, while a Jewish background may facilitate entrance into academic positions for FMGs.

In a previous paper (14), a path model which allowed the weights of personal and environmental variables to be compared supported the view that, although both are important, personal characteristics are more important than environmental factors in predicting the career expectation of either a full-time academic position or full-time practice. The value placed on prerogatives of the job, such as control over working conditions and financial opportunities was the major predictor. Type of

medical school attended ranked second. However, elements which affect the career plans and goals may differ from those which affect actual career outcome.

TABLE 60

1976-1977 Residents in Internal Medicine:

1977 Career Expectations versus 1981 Career

1981 CAREER	1977 CAREER EXPECTATIONS						
	Solo	Group	Acad	Other	Don't Know	T	Row Percents
Solo	18	87	12	2	6	125	22%
Group	4	185	19	2	10	220	39%
Academic	3	38	61	3	4	109	19%
Other	3	70	15	12	5	105	19%
Total	28	380	107	19	25	559	
Column Percents	5%	68%	19%	3%	4%		100%

Source Question:

1981 Career Outcomes - A constructed variable from - Please enter the grouping that identifies your main practice, that is, the one in which you see most of your patients.

1977 Career Expectations - In which way do you think you will organize your career upon completion of all your medical training?

TABLE 61

The Academic Career

	1977: % Expecting Full-Time Academic Position	1981: % in Full-Time Academic Positions	n
Men	22%	20%	507
Women	20	13	61
Protestant	17	18	223
Catholic	21	14	146
Jewish	26	23	116
FMGs	36	22	83
USMGs	20	19	487
High MCAT Score	28	21	208
Low MCAT Score	18	18	362
College Resource			
Score: High	23	21	280
Score: Low	21	17	290
Medical School			
Research	35	31	84
Practice	17	16	377
Residency: Types I & II	28	26	226
Residency: Types III - V	18	15	344

Source Question:

1977 and 1981 Academic positions - see Career Categories from Table 60.

TABLE 62

Career Decision Making: Private Practice versus Institutional Practice

1977 Expectations and 1981 Positions for Selected Groups

(Full-Time Academic Physicians Are Excluded from This Table)

	1977: % Expecting Private Practice	1981: % in Private Practice	n
Men	97%	83%	343
Women	90	68	39
Protestant	96	80	168
Catholic	94	79	101
Jewish	99	90	70
FMGs	96	72	46
USMGs	96	82	338
High MCAT Score	98	84	132
Low MCAT Score	95	79	252
College Resource Score: High	96	81	183
Score: Low	96	82	200
Medical School Research	98	84	43
Practice	96	81	271
Residency: Types 1&2	97	88	244
Residency: Types 3-5	96	77	137

Source Question:

1977 Expectations - see Table 60.
1981 Private Practice - see Table 60.

TABLE 63

Career Decision-Making and Career Values

Percent of 1977 Residents Who Were Attracted by Various Practice Characteristics by 1981 Career: Institutional Practice versus Private Practice

(Full-Time Academicians are excluded from this table).

1977 Career Values Community Characteristics Sought	1981 Career Outcome: Private Practice	Institutional Practice	p<
High per Capita Welfare	1%	10%	.0001
Minorities not Discriminated Against	53	70	.005
Opportunities for a High Income	50	39	.07
Good Schools	73	60	.01
Good Place to Raise a Family	85	72	.004
Community is Politically Liberal	15	27	.009
n physicians	(344)	(89)	

Source Question:

Career Values is a constructed variable from how important is each of the following factors in attracting you to a community?

TABLE 64

Predictability of 1981 Career Attainment Based on 1977 Career Values

1977 CAREER VALUE	1981 CAREER		
A. Characteristics Which Influences Choice of General Internal Medicine vs. Subspecialty	Full-Time Academic	Practice	p
Involvement in Patients' Social and Personal Problems	36%	42%	ns
Ambulatory Patients	34	51	.005
Consultation	81	81	ns
Principal Care Provider	66	79	.02
Long-Term Patient Relationships	70	82	.02
Research Opportunities	75	50	.001

TABLE 64 -- CONTINUED

B. Characteristics Which Influenced Location Decisions	Full-Time Academic	Practice	p
Near Physicians Who Are Known to the Person	41	57	.003
Near a University Medical Center	92	82	.003
Near a Community Hospital	44	78	.0001
Opportunities for Group Practice	61	74	.01
Moderate Malpractice Rates	54	62	ns
Opportunities for a High Income	37	47	.05
Near Family	11	28	.0001
Attractive Climate	47	59	.04
Good Place to Raise a Family	72	81	ns

Source Question:

1981 Career - see Career Categories from Table 60.
Influence Characteristics - Please circle the code which indicated the extent to which you think it describes your future career or patients in this field.
Location Characteristics - Are the following positive or negative factors about your locational choice?

TABLE 65

Academic Career vs. Full-Time Practice: Correlation Coefficients

	1977 Expectations: Academic vs. Practice		1981 Career: Academic vs. Practice	
FMG vs. USMG	.14*		.03	
	USMGs Only	FMGs Only	USMGs Only	FMGs Only
a. Demographic Characteristics				
Women vs. Men	-.01	-.04	-.03	-.19
Jewish vs Non-Jewish	.09*	-.05	.05	.15
b. Personal Characteristics				
MCAT Score	.19*	---	.09	---
Timing of Specialty Decision	-.05	-.11	-.01	-.02
Interest in Investigation	.12*	.14	.10*	.19
Valuation of Job Perquisites	-.18*	-.14	-.16*	-.07
Intention to Subspecialize	.41*	.35*	.29*	.40*

TABLE 65 -- CONTINUED

	1977 Expectations: Academic vs. Practice		1981 Career: Academic vs. Practice	
c. Institutional Relationships				
College Resource Score	.11*	---	.10*	---
Medical School Type	.17*	---	.13*	---
Residency Program Type	.18*	.14	.16*	.07
n physicians	(548)	(87)	(487)	(83)

*Statistically significant at the .05 level.

Source Question:

1981 Career - see 1981 Career Outcomes from Table 60.
1977 Expectations - see 1977 Career Expectations from Table 60.
a. General demographic questions.
b. Personal Characteristics:
MCAT--What was your science MCAT score?
Decision Timing--A constructed variable from three questions about specialty interests asked of those entering medical school, graduating and in post graduate training periods.
Investigation Interest--A constructed variable from - Please let us know your feelings about the appeal of the following occupations.
Perquisites valuation--In thinking about the forces that led you to your chosen field(s), which one(s) of the following was the most important?
Intentions--Which one of the subspecialty or general internal medicine fields is the most important to you?
c. Institutional Relationships:
College Resource Score--Nash, George, A Description of the 1,444 accredited 4 year Institutions of Higher Education. New York: Columbia University, Bureau of Applied Social Research.
Medical School Type--Sherman, C.R. and McShane, M.G., Research and Primary Care: Two Dimensions of Preference in Medical School Admissions. Washington, D.C., Association of American Medical Colleges, 1978.
Residency Program Type -- a constructed variable from the National Study of Internal Medicine Manpower: 11. A Typology of Residency Training Programs in Internal Medicine, Annals of Internal Medicine, vol. 89, no. 5, November, 1978.

Section D. Evaluation of Primary Care Track Training

Basic comparisons of the practices of graduates of primary care tracks and traditional internal medicine tracks provide a starting point for an evaluation of the primary care track programs. Many determinants of practice characteristics are needed for a complete evaluation of the role of primary care tracks in the determination of practice patterns. What specific training strategies were used and how effective were they? How do the graduates of primary care tracks compare to other graduates of similar institutions? What are the career values of internists trained in primary care tracks, compared to others? How did the background characteristics and other preselection factors contribute? How did the career steps of the primary care track general internists compare to the traditionally trained internists?

In evaluating the primary care tracks, the programs may be judged to have had a positive impact if a high proportion of the trainees went into generalist practice, if the practice was rich in primary care measures, if the practice is in a geographic area of need, if the practice serves a needy population, and if the trainees had become primary care teachers and researchers. The program could be considered to have not been successful if the outcomes were those opposite to those listed above: if the trainees went into subspecialty fellowships and practice; if the trainees switched to a non-primary care field; if the trainees were not practicing medicine or teaching. Tables 1 through 51 provide comprehensive information to begin such an evaluation.

Appendix A. Physician Practice Study Advisors

Physician Practice Study

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Appendix B. Survey Instruments

Appendix B.

Exhibit 1. The Locator-Screener

BEGIN DECK 01

Study of Internal Medicine and Family Medicine

INTERVIEWER: COMPLETE Q. 2 BEFORE THE FIRST CALL.

Telephone Screening Assigned to: _____

Physician ID: | | | | | | S | 2 |

01-06/

RECORD OF CALLS

Time	Date	Comments	Initials

Hello Dr. _____, this is _____ from the National Opinion Research Center at the University of Chicago. Last week, you were sent a letter explaining the purpose of a national study of medical practitioners.
Did you receive this letter?

IF DOCTOR DID NOT RECEIVE THE LETTER OR DOES NOT REMEMBER RECEIVING IT, READ THE PARAGRAPH FROM THE APPROPRIATE LETTER.

As described in the letter, your participation in this survey is voluntary and all information you provide is completely confidential.

You may be selected to receive a questionnaire in a few weeks. However, today I have just a few questions about your medical education since 1977 and your current practice. This interview should take only a few minutes of your time.

1. First, I need to make sure that I have reached the correct physician. Were you in training at (READ FROM LABEL) in 1976-77?

Yes 1
No ..... 2 (READ A) 08/

A. I'm sorry, but I have reached the wrong doctor. Thank you for your time.

---

2. INTERVIEWER QUESTION: SEE LABEL

IF RESPONDENT IS:

TRACKER (TRKR or TRKB).....4 SKIP TO PAGE 2 09/
FAMILY PRACTITIONER (FP).....5 SKIP TO PAGE 6

TRACKERS

3. Are you currently in residency training in internal medicine?

Yes ..... 1 SKIP TO SECTION III PAGE 11 10/

No 2

---

4. Where did you take your last year of internal medicine residency training?

_____
(PROGRAM OR HOSPITAL. DO NOT ABBREVIATE)

[ ][ ][ ] 11-13/

_____
(CITY AND STATE)

---

5. In what year did you leave this residency?

ENTER YEAR COMPLETED [1][9][ ][ ] 14-15/

---

6. Counting a straight internship as one year, how many years of residency in internal medicine have you completed?

One or less ..... 1 (GO TO Q. 7) 16/

Two ..... 2 (SKIP TO Q. 8)

Three ..... 3 (SKIP TO Q. 10)

Four ..... 4 (SKIP TO Q. 10)

DECK 01

7. Since the spring of 1977, have you taken a residency in a non-internal medicine specialty such as dermatology or neurology and for which you are board-eligible?

Yes ..... 1 (ASK A-D) 17/

No ..... 2 SKIP TO SECTION II PAGE 8

IF YES:

A. What specialty?

CODE FROM LIST B [ ][ ] 18-19/

B. In what year did you begin this residency?

ENTER YEAR BEGAN [1][9][ ][ ] 20-21/

C. In what year did you complete this residency?

Not completed ..... 96 SKIP TO SECTION III PAGE 11

ENTER YEAR COMPLETED [1][9][ ][ ] 22-23/

24-25/

D. SKIP TO SECTION III, PAGE 11

---

8. Have you taken at least one year of fellowship training in any subspecialty of internal medicine?

Yes ..... 1 (ASK A-D) 26/

No 2

IF YES:

A. What subspecialty?

CODE FROM LIST A [ ][ ] 27-28/

B. In what year did you begin this fellowship?

ENTER YEAR BEGAN [1][9][ ][ ] 29-30/

C. In what year did you complete this fellowship?

Not completed 96

ENTER YEAR COMPLETED [1][9][ ][ ] 31-32/

D. How many years? 33-34/

ENTER NUMBER OF YEARS [ ] 35/

IF 1, SKIP TO SECTION II, PAGE 8;
IF 2 OR MORE, SKIP TO SECTION III, PAGE 11

9. Since the spring of 1977, have you taken a residency in a non-internal medicine specialty such as dermatology or neurology and for which you are board-eligible?

Yes ..... 1 (ASK A-D) 36/

No ..... 2 SKIP TO SECTION II PAGE 8

IF YES:

A. What specialty?

CODE FROM LIST B [ ][ ] 37-38/

B. In what year did you begin this residency?

ENTER YEAR BEGAN [1][9][ ][ ] 39-40/

C. In what year did you complete this residency?

Not completed ..... 96 SKIP TO SECTION III PAGE 11

ENTER YEAR COMPLETED [1][9][ ][ ] 41-42/ 43-44/

D. SKIP TO SECTION III, PAGE 11

---

10. Have you taken at least one year of fellowship training in any subspecialty of internal medicine?

Yes ..... 1 (ASK A-C) 45/

No 2

IF YES:

A. What subspecialty?

CODE FROM LIST A [ ][ ] 46-47/

B. In what year did you begin this fellowship?

ENTER YEAR BEGAN [1][9][ ][ ] 48-49/

C. In what year did you complete this fellowship?

Not completed ..... 96 SKIP TO SECTION III PAGE 11

ENTER YEAR COMPLETED [1][9][ ][ ] 50-51/ 52-53/

DECK 01

11. Since the spring of 1977, have you taken a residency in a non-internal medicine specialty such as dermatology or neurology and for which you are board-eligible?

Yes	1	(ASK A-D)	54/
No	2	SKIP TO SECTION II PAGE 8	

IF YES:

A. What specialty?

CODE FROM LIST B [ ][ ] 55-56/

B. In what year did you begin this residency?

ENTER YEAR BEGAN [1][9][ ][ ] 57-58/

C. In what year did you complete this residency?

Not completed	96	SKIP TO SECTION III PAGE 11	
ENTER YEAR COMPLETED [1][9][ ][ ]			59-60/
			61-62/

D. SKIP TO SECTION III, PAGE 11

BEGIN DECK 02

FAMILY PRACTITIONERS

12. Are you currently in residency training in family medicine?

Yes ..... 1 SKIP TO SECTION III PAGE 11 08/
No 2

13. Where did you take your last year of Family Medicine residency?

(PROGRAM OR HOSPITAL. DO NOT ABBREVIATE)

[ ][ ][ ] 09-11/

(CITY AND STATE)

14. In what year did you begin this residency?

ENTER YEAR BEGAN [1][9][ ][ ] 12-13/

15. In what year did you complete this residency?

ENTER YEAR COMPLETED [1][9][ ][ ] 14-15/

16. Did you subsequently take training in specialty other than Family Medicine for which you are board eligible?

Yes ..... 1 (ASK A-C) 16/
No ..... 2 SKIP TO SECTION II PAGE 8

IF YES:

A. What specialty was that?

CODE FROM LIST A [ ][ ] 17-18/

B. In what year did you begin?

ENTER YEAR BEGAN [1][9][ ][ ] 19-20/

C. In what year did you complete (this residency)?

Not completed 96 21-22/

ENTER YEAR COMPLETED [1][9][ ][ ] 23-24/

DECK 02

17. What do you consider your primary specialty? Is it . . .

Family medicine	1	(SKIP TO SECTION II) 25/
Emergency medicine ...	2	(DISCONTINUE)
or Something else	3	(DISCONTINUE)

SECTION II

18. In what year did you enter your present practice? 26-27/R

ENTER YEAR | 1 | 9 | | | 28-29/

---

19. Is the population of the town in which you currently work less than 50,000?

Yes 1

No 2 30/

---

20. Do you plan to spend the next five years in this city, town, or suburb?

Yes 1

No 2 31/

DECK 02

21. Which of the three phrases best describes your present position or practice? Are you currently in . . . (READ NUMBER AND CATEGORY FOR EACH RESPONSE)

1.	Full time academic medicine ..	1	(ASK A & B)
2.	Practice and part-time teaching	2	(ASK A-C)
3.	Full-time practice	3	(ASK C)
4.	Other (SPECIFY) _____	4	(GO TO Q. 22)

32/

A. Does this academic position emphasize teaching, research, or practice?

Research and teaching	1
Practice and teaching	2
Other (SPECIFY) _____	3

33/

B. At which of the following types of institutions do you work? Is it a . . . (READ EACH CATEGORY AND ASK FOR A RESPONSE TO EACH)

	Yes	No	
A university medical center	1	2	34/
A community hospital affiliated with a university	1	2	35/
A hospital not affiliated with a university	1	2	36/
A VA hospital	1	2	37/
A military hospital	1	2	38/
National Institutes of Health	1	2	39/
Some other research institute	1	2	40/

C. Which of the following four types of arrangements best describes your current practice? Is it a . . . (READ NUMBER AND CATEGORY)

	solo practice	1
	single-specialty group ..	2
	multispecialty group ...	3
	neighborhood health center	4
	a hospital or institution-based practice	5
IF VOLUNTEERED:	Other (SPECIFY) _____	6

41-42/

DECK 02

22. What percentage of the patients you see are from low-income families, that is from a family with an income of $10,000 or less?

PROBE FOR BEST GUESS.

ENTER PERCENTAGE: ☐☐☐ % 43-45/

---

23. What percentage of the patients you see are black?

PROBE FOR BEST GUESS

ENTER PERCENTAGE: ☐☐☐ % 46-48/

---

24. What percentage of the patients you see are of Hispanic origin?

PROBE FOR BEST GUESS.

ENTER PERCENTAGE: ☐☐☐ % 49-51/

---

25. About how many outpatient visits do you see in a typical week?

ENTER NUMBER: ☐☐☐ 52-54/

BEGIN DECK 03

III

SECTION III

26. (NOW) I need to verify your mailing address. Is it . . . (READ ADDRESS FROM UPDATE OR LABEL IF NONE IN UPDATE)?

Yes ..... 1 (ASK B) 08/

No ..... 2 (ASK A & B)

A. What is your correct mailing address? (IF R ASKS, "HOME OR PROFESSIONAL?" EXPLAIN "THE ADDRESS AT WHICH YOU PREFER TO RECEIVE MAIL).

NAME (IF CHANGED) 09-33/

INSTITUTION 34-58/

BEGIN DECK 04

INSTITUTION 08-32/

STREET ADDRESS 33-57/

BEGIN DECK 05

58-73/ 08-09/ 10-14/

CITY STATE ZIP CODE

B. Is this your professional or home address?

Professional ..... 1 (ASK C) 15/

Home ..... 2 (ASK D)

C. What county is that?

COUNTY _____ (GO TO Q. 27)

D. What are the city, county and zipcode of your professional address?

CITY _____

COUNTY _____

ZIPCODE _____

DECK 05

27. What is your . . .

Professional phone number ☐☐☐ - ☐☐☐ - ☐☐☐☐ 16-25/

---

28. Do you have an alternate professional phone number?

Yes ..... 1 ☐☐☐ - ☐☐☐ - ☐☐☐☐ 26/

No 2 27-36/

---

29. And what is your home phone number?

☐☐☐ - ☐☐☐ - ☐☐☐☐ 37-46/

Refused 7 47/

---

30. Are you planning to move your professional practice in the next year?

Yes ..... 1 (ASK A & B) 48/

No ..... 2 (DISCONTINUE)

A. When are you planning to move?

☐☐☐☐ 49-52/

MONTH YEAR

B. Where are you planning to move? BEGIN DECK 06

INSTITUTION OR ADDRESS 08-32/

CITY 33-57/ STATE 58-59/

That is all the questions I have. Within the next few weeks you may receive a questionnaire from the National Study of Internal Medicine Manpower.

Thank you very much for your time.

GO
TO
BACK
PAGE

FINAL DISPOSITION AND NONINTERVIEW REPORT

1. TRACKERS ARE ELIGIBLE IF ANSWERED '2' TO Q. 11.
FPs ARE ELIGIBLE IF ANSWERED '2' TO Q. 16 OR '1' TO Q. 17.

Was this doctor . . .

Eligible	01		60-61/
Ineligible	02		
Unavailable during screening period .	03	(ANSWER A)	
Refused	04	(ANSWER A)	
Breakoff	05	(ANSWER A)	
Unlocatable	06		
Other (SPECIFY)			
_____	07		

A. Reason

Too busy	1	62/
On vacation or at a conference	2	
Illness	3	
Covering for another MD	4	
Other (SPECIFY)		
_____	5	

2. Date of this report.

						63-68/
MONTH		DAY		YEAR		

Appendix B.

Exhibit 2. The Physician Questionnaire

4319
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D1

NATIONAL STUDY OF INTERNAL MEDICINE MANPOWER

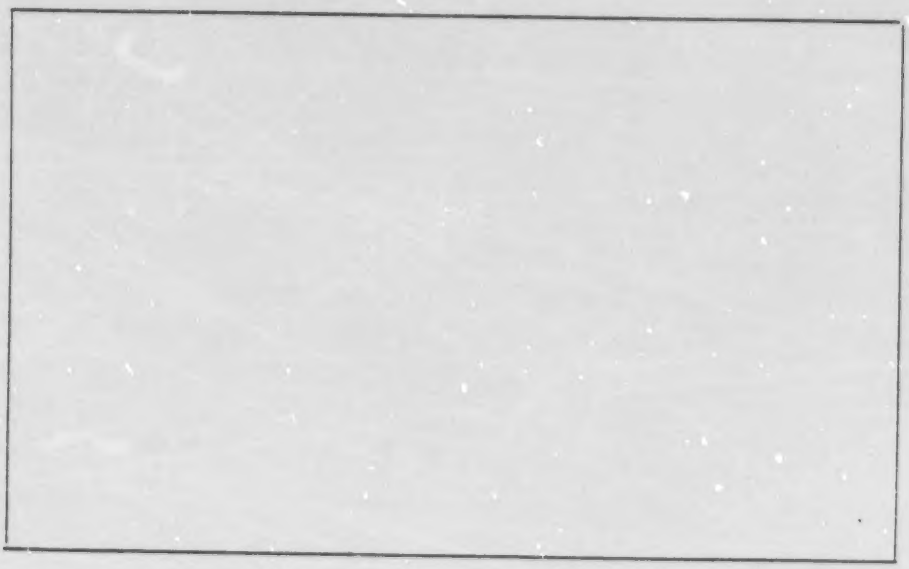
NaSIMM

QUESTIONNAIRE V

PART I

In collaboration with
Association of Professors of Medicine

Questionnaire Distributed by
National Opinion Research Center
University of Chicago



ALL INFORMATION IN THIS QUESTIONNAIRE WHICH WOULD PERMIT IDENTIFICATION OF INDIVIDUALS AND INSTITUTIONS WILL BE REGARDED AS STRICTLY CONFIDENTIAL. THIS INFORMATION WILL BE USED ONLY FOR THE PURPOSES OF THE SURVEY AND WILL NOT BE DISCLOSED OR RELEASED TO ANY OTHER GROUP OR INDIVIDUAL. ALL INFORMATION OBTAINED BY THE SURVEY WILL BE GROUPED AND REPORTED ONLY IN STATISTICAL FORM.

PART I

INTRODUCTION

PLEASE READ THESE INSTRUCTIONS AND REVIEW THE ENTIRE QUESTIONNAIRE BEFORE YOU BEGIN.

It is the purpose of the study to gather information about:

- o Your background and training
- o The organization of your practice
- o Your professional activities
- o The patients you see

The questionnaire is divided into three sections, each a different color.

I. PHYSICIAN QUESTIONNAIRE (IN THIS BOOKLET)

The Physician Questionnaire asks for information about your background and your practice or position. Please complete this section first.

II. OUTPATIENT ENCOUNTER FORMS (PURPLE FORMS IN SECOND BOOKLET)

A separate form is to be completed for each face-to-face encounter you have with a patient in an outpatient setting during the three Assigned Study Days. See the cover label for the dates assigned to you.

III. HOSPITAL INPATIENT ENCOUNTER FORMS (GREEN FORMS IN SECOND BOOKLET)

A separate form is to be completed for each patient visited in the hospital during the three Assigned Study Days. Since an individual patient may be seen several times during the three days, return to the original form and enter additional information after each visit.

GENERAL INSTRUCTIONS

It is important that you record patient encounters for only the three Assigned Study Days listed on the cover of this booklet. PLEASE DO NOT SELECT ALTERNATIVE DAYS.

Familiarizing yourself with the instructions before proceeding will reduce the impact of this study on your normal practice pattern. Please carry the Patient Encounter Form booklet with you during your Assigned Study Days because accuracy is improved by recording information at the actual time of encounter.

PATIENT QUESTIONNAIRE

We are also conducting interviews by mail questionnaire with a very small number of outpatients from each doctor in the study. For medical reasons you may wish to exclude a patient from receiving a questionnaire; there is space on the outpatient form to note such cases (see top of Outpatient Encounter Form). We hope this exclusion will be rare. If you exclude the patient or if the patient

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ASSOCIATION OF PROFESSORS OF MEDICINE

Task Force on Manpower Needs in Internal Medicine

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Questionnaire Distributed by:

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declines, please complete the outpatient form for that patient and simply omit the name. For all other patients, read to them the statement printed on the back flap of the booklet. This statement has been approved by federal authorities as meeting requirements for informed consent from patients. Please give a copy of the information sheet, SPECIAL STUDY OF PATIENTS, to those who wish more information. If the patient agrees to participate, print the patient's name in the space provided on the top of the Outpatient Encounter Form. Only a small fraction of those who agree to participate will actually receive a questionnaire.

When you return your booklets to us, the names of a few of your outpatients will be selected at random from those who agreed to participate. We will phone your office for their addresses and then we will mail the questionnaire to them. The names of patients will be used only for sampling and matching purposes and will be destroyed as soon as those tasks are completed. The privacy of every physician and the confidentiality of the doctor-patient relationship will be respected completely. The responses of your patients will not be used to evaluate you. Their perceptions of their health needs will be aggregated and reported as a group only.

If you have any questions or concerns, call collect to:

Dr. Peter Weil
(312) 947-7404, weekdays - 8:30 am to 5:00 pm
(312) 288-7685, all other times

When you have completed all relevant sections of the questionnaire and the Patient Encounter Form booklet for your Assigned Study Days, please return them in the enclosed prepaid envelope.

THANK YOU.

PART I

PHYSICIAN QUESTIONNAIRE

INTERNAL MEDICINE PHYSICIANS

INSTRUCTIONS

Please read each question carefully.

In most cases, you should circle the number of the ONE answer that best fits you.

EXAMPLE 1:

3. Are you certified by the American Board of Internal Medicine?

Yes 1

No ..... (2)

Follow any instructions next to the number circled that directs you to another question.

EXAMPLE 2:

2. During residency training, were you ever in a specifically designated Primary Care Residency Track Program? These are programs which are: formally titled Primary Care Track; have separate Internal Medicine Program numbers; and, have separate funding from government or granting sources.

Yes, I was in a Primary Care Residency Track Program ..... (1) (ANSWER A)

No, I was not in a Primary Care Residency Track Program 2

IF YES:
A. How many years were you in a Primary Care Residency Program?

ENTER NUMBER OF YEARS: [/]

If there are no instructions after your answer, go to the following question.

For some questions you will be asked to supply a number or some other form of information, a box or line is provided for you to enter your answer. Example 2A above illustrates this type of question.

Please answer every question that applies to you. If none of the responses provided for a question seem exactly right, choose the one that is nearest to being right.

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TRAINING AND CERTIFICATION

1. From what school did you receive your medical degree?

_____
Name of Medical School (PLEASE DO NOT ABBREVIATE)

_____
City and State Where School Is Located

[ ][ ][ ] 13-15/

---

2. During residency training, were you ever in a specifically designated Primary Care Residency Track Program? These are programs which are: formally titled Primary Care Track; have separate Internal Medicine Program numbers; and, have separate funding from government or granting sources.

Yes, I was in a Primary Care Residency Track Program ..... 1 (ANSWER A) 16/

No, I was not in a Primary Care Residency Track Program 2

IF YES:
A. How many years were you in a Primary Care Residency Program?

ENTER NUMBER OF YEARS: [ ] 17/

---

3. Are you certified by the American Board of Internal Medicine?

Yes 1

No 2 18/

4. Are you certified by the American Board of Internal Medicine in any subspecialty?

Yes ..... 1 (ANSWER A) 19/

No 2

IF YES:

A. Circle the number code for the subspecialty in which you are certified.

(Circle one number)

Cardiovascular Disease	01	20-21/
Endrocrinology or Metabolism	02	
Gastroenterology	03	
Combined Hematology-Oncology	04	
Hematology	05	
Medical Oncology	06	
Infectious Disease	07	
Nephrology	08	
Pulmonary Disease	09	
Rheumatology	10	
Allergy or immunology	11	
Other (PLEASE SPECIFY) _____	12	

5. Are you a member of the following organizations? Please circle all that apply.

	Yes	No	
American Medical Association.....	1	2	22/
National Medical Association.....	1	2	23/
State Medical Society.....	1	2	24/
American Society of Internal Medicine.....	1	2	25/
American College of Physicians.....	1	2	26/

6. On the average, what percentage of your total professional work time per week is currently spent in your subspecialty (if you have one), and what percentage is spent in general internal medicine?

	(Total should equal 100%)	
General Internal Medicine	☐☐☐	27-29/
Subspecialty Medicine	☐☐☐	30-32/
Total	100%	

WORK HISTORY

7. These questions are about your first practice or position after completing an internal medicine residency or fellowship training program.

Which of the following best describes your first practice or position?

Academic medicine only (includes Chief Resident)	1	(GO TO A)	33/
Practice and part time-teaching	2	(GO TO C)	
Practice only	3	(GO TO C)	
Other (SPECIFY) _____	4	(GO TO Q. 8)	

A. Did this academic position emphasize research and teaching or practice and teaching?

Research and teaching	1	(GO TO B)	34/
Practice and teaching	2		
Other (SPECIFY) _____	3		

B. At which of the following types of institutions did you work?

A university medical center	01	(GO TO Q. 8)	35-36/
A university affiliated teaching hospital..	02		
A hospital not affiliated with a university	03		
A VA hospital	04		
A military hospital	05		
National Institute of Health	06		
Some other research institute	07		

C. Which of the following best describes your first practice?

Solo office-based practice	1		37/
Single-specialty group (a formally organized group or partnership with one or more other MDs in your specialty only and with whom you routinely share equipment, personnel, and office facilities) ...	2		
Multi-specialty group (a formally organized group or partnership with specialists from other fields and with whom you routinely share equipment, personnel, and office facilities)	3	(GO TO D)	
Neighborhood Health Center (an organizational structure where patients are affiliated primarily with the facility rather than any individual physician within the Center; usually tax-supported to provide care for the underserved)	4		
A hospital or institution based practice	5		

D. In how many different locations have you practiced? By location we mean a city, town or suburb.

ENTER NUMBER OF LOCATIONS: [ ] 38/

8. Are you currently fulfilling a military obligation, Public Health service assignment or in any other nonvoluntary position?

Yes	1	(GO TO Q. 9)	39/
No	2	(ANSWER A)	

A. IF NO: Below is a list of sources through which physicians often learn about available positions (i.e., employment of practice). Please indicate how you first learned about the first full-time position you took voluntarily after you left your most recent residency or training.

(Circle one number)

Faculty of a training program you attended	01	40-41/
Other residents or fellows	02	
Members or personnel of the first position	03	
A previous employer	04	
A relative or friend	05	
A school-based placement service	06	
A commercial placement service	07	
An advertisement in a journal or newspaper	08	
Went to the community and looked on own initiative	09	
Have never held a full-time position after training	10	
Some other source (PLEASE SPECIFY) _____ ...	11	

---

9. Did you enter your present position or practice immediately after completing your residency or fellowship?

Yes	1		42/
No	2	(ANSWER A)	

A. IF NO: How many different positions (full-time employment or practice) have you held since leaving your most recently completed training program? Include your present practice or position.

ENTER NUMBER OF POSITIONS: [ ] 43/

---

10. In what year did you enter your present practice or position?

ENTER YEAR: [1][9][ ][ ] 44-45/

11. Which of the following best describes the circumstances under which you entered your present practice or position?

(Circle one number)

You replaced an internist in your field ...	1	46/
Your position was added to a group or other arrangement	2	
You established the position on your own .	3	
You formed a professional association with other physicians and together you established the position	4	
Other (PLEASE SPECIFY) _____	5	

12. In making a career choice, many things often act together in influencing a decision. In thinking about the forces that led you to choose between a career devoted primarily to general internal medicine or to a subspecialty, which of the following was the most important, which the second most important, and which the third most important influence.

(Circle ONE number in each column)

	Most Important	Second Most Important	Third Most Important	
People in your life (such as family, friends or relatives)	1	2	3	47/
Flexibility in scheduling free time and working hours	1	2	3	48/
Financial opportunities	1	2	3	49/
Practice would not be referral-dependent	1	2	3	50/
Substantive content of the field	1	2	3	51/
Opportunities to teach and do research	1	2	3	52/
Need for that type of physician in the community where you intended to practice	1	2	3	53/
Other (SPECIFY) _____	1	2	3	54/

YOUR CURRENT PROFESSIONAL ACTIVITIES

13. How many hours of your total professional work time per week are spent in each of the following activities? (Exclude on-call hours)

	(Number of hours)	
Patient care (including patient administration)	☐☐	55-56/
Teaching	☐☐	57-58/
Research	☐☐	59-60/
Nonpatient Administration	☐☐	61-62/
Other	☐☐	63-64/
Total number of professional hours	☐☐	65-66/

14. Over a year's time, how is your current professional time divided among the following practice arrangements and positions? Enter the percentage of your total professional work time spent in each of the categories.

	(Total should equal 100%)	
A. Solo office-based practice	☐☐☐	08-10/
B. Single-specialty group (a formally organized group or partnership with one or more other MDs in your specialty only and with whom you routinely share equipment, personnel, and office facilities)	☐☐☐	11-13/
C. Multi-specialty group (a formally organized group or partnership with specialists from other fields and with whom you routinely share equipment, personnel and office facilities)	☐☐☐	14-16/
D. Neighborhood Health Center (an organizational structure where patients are affiliated primarily with the facility rather than any individual physician within the Center; usually tax-supported to provide care for the underserved)	☐☐☐	17-19/
E. Academic department, salaried	☐☐☐	20-22/
F. Academic department, voluntary	☐☐☐	23-25/
G. Veterans Administration Hospital	☐☐☐	26-28/
H. Other hospital-employed position	☐☐☐	29-31/
I. Nursing home staff	☐☐☐	32-34/
J. Military	☐☐☐	35-37/
K. Other (SPECIFY) _____	☐☐☐	38-40/
Total	100%	

15. Do you see patients in any of the settings listed in Question 14?

Yes 1 41/

No ..... 2 (GO TO Q. 51)

---

16. Please enter in the box below the letter from Question 14 that identifies your main practice--that is, the one in which you see most of your patients.

Letter identifying your main practice for the rest of the questionnaire. ☐ 42/

---

17. Thinking about your main practice, describe in your own words why you chose to work in that kind of setting.

43-44/

45-46/

---

18. At how many hospitals do you have admitting privileges? If none enter 0.

ENTER NUMBER ☐ 47/

YOUR MAIN PRACTICE

19. We would like to know how many full time physicians, including yourself, work directly with you in this main practice.

If you are in academic medicine exclude residents and fellows, but include staff physicians in your section.

A. How many of the physicians, including yourself if appropriate, are general internists?

ENTER NUMBER OF GENERAL INTERNISTS ☐☐ 48-49/

B. How many of the physicians including yourself if appropriate, are subspecialty internists?

ENTER NUMBER OF SUBSPECIALTY INTERNISTS ☐☐ 50-51/

C. How many of the physicians are specialists in other fields?

ENTER NUMBER OF OTHER SPECIALISTS ☐☐ 52-53/

D. Total physicians, including yourself, working with you in the main practice.

ENTER TOTAL NUMBER OF PHYSICIANS ☐☐ 54-55/

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20. Below are descriptions of some common expense- and income-sharing arrangements. Please read each carefully and circle the number for the one which comes closest to describing the financial arrangements in your main practice.

(Circle one number)

Physicians are paid a salary, while the expenses are paid by the employing institution 1 56/

A single physician pays all expenses and controls all income 2

Expense sharing, in which two or more physicians share expenses, but each retains all income he or she personally generates 3

Equal income sharing, in which two or more physicians share both expenses and revenues equally 4

Unequal income sharing, in which two or more physicians share net income based on a previously determined formula ..... 5 (ANSWER A)

IF UNEQUAL INCOME SHARING:

A. Formulae for unequal income sharing may include several factors. Please circle the number which indicates how important each of these factors is in determining the income sharing in your main practice.

(Circle one number on each line.)

	Very important	Fairly important	Somewhat important	Not too important	Not at all important	
Patient Volume	1	2	3	4	5	57/
Investment in the practice	1	2	3	4	5	58/
Field of specialization	1	2	3	4	5	59/
Certification (e.g., by ABIM)	1	2	3	4	5	60/
Seniority	1	2	3	4	5	61/

21. Which of the following types of health professionals work with you in patient care in your main practice?

	(Circle one number on each line.) Work with you	Do not work with you	
Nurse Clinician	1	2	62/
Nurse Practitioner	1	2	63/
Other registered nurse	1	2	64/
Licensed practical or vocational nurse	1	2	65/
Medex or Physician's Assistant..	1	2	66/
Psychologist	1	2	67/
Social worker	1	2	68/
Dietician or nutritionist	1	2	69/
Medical technician	1	2	70/
Health Educator	1	2	71/

22. Please estimate for your main practice the average number of days between the date one of your patients calls for a nonemergency appointment and the actual date of the visit, for . . .

BEGIN DECK 03

Patients you have seen before . . .

Number of Days [ ][ ] 08-09/

New patients . . .

Number of Days [ ][ ] 10-11/

23. At the busiest time of day, in your main practice . . .

About how many of your patients are usually in the waiting room?

Number of Patients [ ][ ] 12-13/

About how long do your patients wait before entering an examination or consultation room?

Minutes [ ][ ][ ] 14-16/

24. Does your main practice accept nonscheduled (walk-in) non-emergency patients who have not been seen in your office before?

(Circle one number)

Always	1	17/
Almost always	2	
Sometimes	3	
Almost never	4	
Never	5	

---

25. In your main practice, what percentage of the new patients are self-referred--that is, not referred by another doctor or by an agency?

Self-referred ☐☐☐ % 18-20/

---

26. Thinking about your ambulatory patient encounters at your main practice, what percentage of them . . .

	(Total should equal 100%)	
Are covered by private insurance	☐☐☐ %	21-23/
Are covered by Medicare	☐☐☐ %	24-26/
Are covered by Veterans Administration	☐☐☐ %	27-29/
Are covered by Medicaid, or other public funding (e.g., in a publicly subsidized clinic or OPD)	☐☐☐ %	30-32/
Are covered by a prepaid capitation plan (such as a health maintenance organization or an independent practice association)	☐☐☐ %	33-35/
Have no coverage by a third party payer (that is the patient or family pays all costs out-of-pocket)	☐☐☐ %	36-38/
Are donated services	☐☐☐ %	39-41/
Other (PLEASE SPECIFY) _____	☐☐☐ %	42-44/
Total	100%	

27. Which of the following best describes the site of your main practice?

(Circle one number)

Office (including clinic)	1	45/
Hospital OPD (including satellite clinics)	2	
Hospital Emergency Room	3	
Hospital other than OPD and E.R.	4	
Extended care facility (e.g., nursing home)	5	

---

28. Which of the following phrases comes closest to describing the area in which your main practice is located?

(Circle one number)

Central business district	1	46/
A neighborhood business or shopping district	2	
A medical island, that is, part of a hospital medical complex	3	
A residential area	4	
Other (PLEASE SPECIFY) _____	5	

---

29. How many times have you moved your main practice since completing your most recent residency or fellowship?
If you have not moved, enter '0.'

Number of Moves: ☐ 47/

---

30. In how many different cities, towns and suburbs have you had a main practice?
If you have only practiced in one area, enter '1.'

Number of Areas: ☐☐ 48/

YOUR OVERALL PRACTICE

THIS SET OF QUESTIONS IS ABOUT YOUR OVERALL PRACTICE, NOT ONLY YOUR MAIN PRACTICE. PLEASE ANSWER THE QUESTIONS IN RELATION TO ALL YOUR PRACTICE SITES.

31. For how many months have you practiced continuously in the area from which your patients are currently drawn?
If less than one month, enter '00.'

ENTER NUMBER OF MONTHS: ☐☐ 49-50/

---

32. In the area from which you draw your patients, are there too few, about the right number or too many internists in your field? If you are a general internist, think of general internists; if you are a subspecialist, think of subspecialty physicians.

51/

Too few 1
About the right number .. 2
Too many 3

---

33. Please take a moment to consider a typical 7 day week and answer the following questions based on that week.

During a typical 7 day week (Sunday through Saturday):

A. Excluding patients cared for primarily by residents and fellows, how many outpatient visits would you have during the week? If you see the same patient twice, count each encounter. Include nursing home, Emergency Room and Out Patient Departments as well as office patients.

ENTER NUMBER OF VISITS: ☐☐☐ 52-54/

B. During a typical week, on the average how many patients do you have under your name in the hospital at any one time? Exclude patients cared for primarily by residents and fellows.

ENTER NUMBER OF PATIENTS: ☐☐ 55-56/

C. On the average, how many consultations do you answer in the hospital in a typical week? Exclude patients cared for primarily by residents and fellows.

ENTER NUMBER OF CONSULTATIONS: ☐☐ 57-58/

D. How many telephone calls would you have with patients or their families during a typical week? Exclude patients cared for primarily by residents and fellows.

ENTER NUMBER OF TELEPHONE CALLS: ☐☐☐ 59-61/

34. Do you have a practice or an office in a low-income urban neighborhood, on the fringe of such a neighborhood, or in a low income rural area?

(Circle one number on each line.)

	Practice in this kind of area	Do not practice in this kind of area	
Low-income urban neighborhood	1	2	62/
On the fringe of a low-income urban neighborhood	1	2	63/
In a low-income rural area	1	2	64/

BEGIN DECK 04

35. What percentage of all your patients fall into each of these income groupings?

(Total should equal 100%)

Low income ..... [ ][ ][ ] 08-10/

Middle income ..... [ ][ ][ ] 11-13/

High income ..... [ ][ ][ ] 14-16/

Total 100%

36. Please estimate what percentage of <u>all your patients</u> fall into each of the following racial or ethnic groups.

	(Total should equal 100%)		
White, non-Hispanic	☐☐☐	%	17-19/
Black, non-Hispanic	☐☐☐	%	20-22/
Hispanic	☐☐☐	%	23-25/
Asian or Pacific Islander	☐☐☐	%	26-28/
American Indian or Alaskan Native ..	☐☐☐	%	29-31/
Total	100%		

---

37. Of <u>all of your patients</u>, for what percentage are you their primary care physician?

ENTER PERCENTAGE ☐☐☐ % 32-34/

---

38. In any of your practice arrangements, do you, yourself . . .

	(Circle one number on each line.) Yes	No	
Treat emergencies in person after office hours	1	2	35/
Have regular office hours on any nights during the week	1	2	36/
Have regular office hours on Saturday mornings	1	2	37/
Have regular office hours on weekends, besides Saturday mornings	1	2	38/
Make house calls, at least one per month	1	2	39/

PATIENT COUNSELING

THIS SECTION IS ABOUT HOW YOU COUNSEL PATIENTS ON THEIR HEALTH HABITS.

39. Do you or your staff counsel any of your patients about smoking?

40/

Yes 1

No ..... 2 (GO TO Q. 45)

---

40. How do you provide counseling about smoking? Do you routinely . . .

	(Circle one number on each line.) Yes	No	
Encourage non-smokers to avoid smoking	1	2	41/
Discuss risks of smoking with smokers and attempt to persuade them to stop	1	2	42/
Recommend alternative habits, such as exercise ..	1	2	43/
Discuss smoking with the patient's family to get their cooperation	1	2	44/
Present pamphlets or educational materials to smokers	1	2	45/
Refer the patient to anti-smoking agencies	1	2	46/
Have other office personnel (e.g., nurse) counsel the patient about smoking	1	2	47/
Suggest specific steps to take in reducing or stopping smoking	1	2	48/
Explore the patient's feelings about smoking	1	2	49/
Encourage the patient to change to a low tar cigarette, cigar or pipe	1	2	50/
Do something else (PLEASE SPECIFY) _____	1	2	51/

41. For those patients who smoke, how often do you bring up the subject of stopping or reducing their smoking, on the average?

(Circle one number)

Initial visit only	1	52/
Every few visits or so	2	
Almost every visit	3	
Every time I see the patient	4	

---

42. In the last month, when you talked with patients about smoking, how much time did you spend on the subject, on the average, per patient?

(Circle one number)

I did not discuss the subject	1	53/
Up to 2 minutes	2	
2 to 5 minutes	3	
5 to 10 minutes	4	
More than 10 minutes	5	

---

43. Choose the one response that best describes your style of discussing smoking with your patients in the last month.

(Circle one number)

I did not discuss smoking with my patients ..	1	54/
I discussed smoking whenever the patient brought up the subject	2	
I discussed smoking either when the patient brought up the subject, or when I thought smoking was immediately harmful to the patient's health	3	
I sometimes discussed smoking, even when there was no immediate health hazard	4	
I made it a point to discuss smoking with all my patients	5	

44. Of your patients who smoke, what percentage in each of the categories listed do you counsel to reduce or stop smoking?

(Circle one number on each line.)

	0-25%	26-50%	51-75%	76-100%	
Smokers with heart disease	1	2	3	4	55/
Smokers with chronic lung disease	1	2	3	4	56/
All smokers	1	2	3	4	57/

45. Do you or your staff counsel any of your patients about exercise, such as walking, biking or swimming?

Yes 1 58/

No ..... 2 (GO TO Q. 51)

46. How do you routinely provide counseling about exercise such as walking, biking or swimming? Do you . . .

(Circle one number on each line.)

	Yes	No	
Discuss exercise with patients, emphasizing health benefits, and attempt to persuade them to exercise	1	2	59/
Discuss exercise with the patient's family to get their cooperation	1	2	60/
Present pamphlets or educational materials on exercise	1	2	61/
Suggest specific exercise regimens	1	2	62/
Refer patients to exercise or athletic clubs ...	1	2	63/
Have other office personnel (e.g., nurse) counsel patients about exercise	1	2	64/
Explore the patient's feelings about exercise ..	1	2	65/
Do something else (PLEASE SPECIFY)	1	2	66/

47. For those patients who have poor exercise habits, how often do you bring up the subject of improving their exercise habits on the average?

(Circle one number)

Initial visit only	1	67/
Every few visits or so	2	
Almost every visit	3	
Every time I see the patient	4	

---

48. In the last month, when you talked with patients about exercise, how much time did you spend on the subject, on the average, per patient?

(Circle one number)

I did not discuss the subject	1	68/
Up to 2 minutes	2	
2 to 5 minutes	3	
5 to 10 minutes	4	
More than 10 minutes	5	

---

49. Choose the one response that best describes your style of discussing exercise with your patients in the last month.

(Circle one number)

I did not discuss regular exercise with my patients	1	69/
I discussed regular exercise whenever the patient brought up the subject	2	
I discussed the subject of regular exercise when the patient brought up the subject or when there was any immediate health threat that could be helped by exercise	3	
I sometimes discussed regular exercise, even when there was no immediate health threat that could be helped by regular exercise .	4	
I made it a point to discuss regular exercise with all my patients	5	

50. In each of the following three categories, what percentage of patients do you counsel regarding their exercise habits?

(Circle one number on each line.)

	0-25%	26-50%	51-75%	76-100%	
Patients with heart disease	1	2	3	4	08/
Patients with obesity	1	2	3	4	09/
All patients	1	2	3	4	10/

COMMUNITY SELECTION

51. Is your practice or position in a city with a population greater than 250,000 or within 50 miles of such a city?

(Circle one number)

In a city over 250,000 ..... 1 (GO TO Q. 52) 11/

Within 50 miles of a city over 250,000 ..... 2 (ANSWER A)

More than 50 miles from a city over 250,000 ..... 3 (ANSWER A)

IF OUTSIDE A CITY OVER 250,000:

A. Which of the following best describes the locality in which your practice or position is located?

(Circle one number)

In a medium-size city between 50,000 and 250,000 ... 1 12/

In a small city or town between 25,000 and 50,000 ... 2

In a town between 5,000 and 25,000 3

In a town under 5,000 4

In a rural area 5

52. Do you plan to spend the next five years in this community?

Yes 1 13/

No 2

Uncertain 3

---

53. Thinking about the community (city, town, or rural area) where your practice or position is located, please describe in your own words the most important reason for choosing to work in that community.

14-15/

---

54. When you chose the community where <u>your main practice or position is located</u>, how important were each of the following factors in attracting you to the community?

(Circle one number on each line.)

	Very important	Fairly important	Somewhat important	Not too important	Not at all important	
Migration in and out of the community was low	1	2	3	4	5	16/
The community was the kind of place in which you wanted to live	1	2	3	4	5	17/
You knew physicians in the community	1	2	3	4	5	18/
There was a university medical center in the community	1	2	3	4	5	19/
There were good medical facilities (hospitals or diagnostic modalities) available in the community	1	2	3	4	5	20/
The patient load was low compared to other communities	1	2	3	4	5	21/
There were opportunities to join a group practice	1	2	3	4	5	22/
There were few patients receiving Medicaid or other public assistance in the community	1	2	3	4	5	23/
The community needed internists in your field	1	2	3	4	5	24/
You already had a patient following in the community	1	2	3	4	5	25/
Foreign and minority physicians were accepted in the community	1	2	3	4	5	26/
The community had a reputation for being financially responsible	1	2	3	4	5	27/
Medicare/Medicaid reimbursement schedules were high relative to other areas	1	2	3	4	5	28/
There were opportunities to teach or do research	1	2	3	4	5	29/
The community provided an opportunity to earn a high income	1	2	3	4	5	30/

55. Does the community where your practice or position is currently located have a rapidly growing population?

Yes 1
No ..... 2 } (ANSWER A) 31/

A. Was this fact something you liked about the community, something you disliked about the community or something you did not care about?

(Circle one number)

Something you liked about the community ..... 1 (ANSWER B) 32/

Something you disliked about the community ..... 2 (ANSWER B)

Something you did not care about .. 3 (GO TO Q. 56)

Something that was not true of this community ..... 4 (GO TO Q. 56)

B. How important was this feeling in your decision to work in this community? Was it . . .

(Circle one number)

Very important 1 33/

Fairly important 2

Somewhat important 3

Not too important 4

Not at all important .. 5

56. When you chose the community <u>where you currently live</u>, how important were each of the following in attracting you to the community?

(Circle one number on each line.)

	Very important	Somewhat important	Not at all important	
The community was friendly	1	2	3	34/
It was in the kind of area in which you wanted to work	1	2	3	35/
You had family ties in the area	1	2	3	36/
You already lived there and did not want to leave	1	2	3	37/
There were good schools in the community	1	2	3	38/
There were many cultural opportunities	1	2	3	39/
It was a good place to raise a family	1	2	3	40/
The climate was attractive	1	2	3	41/
Your spouse already had a job there	1	2	3	42/
Foreign and minority groups were not discriminated against in the community	1	2	3	43/
Outdoor recreation was readily available	1	2	3	44/
The community was politically liberal	1	2	3	45/
The distance you would have to travel to work was about right	1	2	3	46/

57. When you chose the area or community where you currently live and work, which of the following was more important in your decision?

(Circle one number)

The social, cultural, and geographic advantages of the area	1	47/
Professional opportunities in the area	2	

FUTURE PLANS

58. For each of the following, indicate whether it describes a way in which you plan to change your professional activities within the next five years.

(Circle one number on each line.)

	Yes	No	Uncertain/ Not Applicable	
A. Pursue full-time subspecialty training in one of the internal medicine specialties	1	2	3	48/
B. Pursue full-time training in a non-internal-medicine specialty	1	2	3	49/
C. Move main practice to a different city, town or suburb	1	2	3	50/
D. Accept a full-time or nearly full-time academic position	1	2	3	51/
E. Leave a full-time or nearly full-time academic position	1	2	3	52/
F. Begin full-time employment in government or industry	1	2	3	53/
G. Begin a private practice, solo	1	2	3	54/
H. Enter a private practice with two or more other physicians	1	2	3	55/

PERSONAL

59. We would like to know your feelings about each of the following occupations. Please circle the appropriate number to indicate whether you find it interesting or appealing, or whether you find it uninteresting or unappealing. If you are undecided about a particular occupation, do not circle any code for it.

	(Circle one number on each line.) Interesting or appealing	Uninteresting or unappealing	
Airplane Mechanic	1	2	56/
Meteorologist	1	2	57/
Playwright	1	2	58/
Sociologist	1	2	59/
Speculator	1	2	60/
Financial Analyst	1	2	61/
Fish and Wildlife Specialist	1	2	62/
Biologist	1	2	63/
Symphony Conductor	1	2	64/
High School Teacher	1	2	65/
Buyer	1	2	66/
Business Teacher	1	2	67/
Auto Mechanic	1	2	68/
Astronomer	1	2	69/
Musician	1	2	70/
Juvenile Delinquency Expert	1	2	71/
Advertising Executive	1	2	72/
Budget Reviewer	1	2	73/
Electrician	1	2	74/

BEGIN DECK 06

59. (Continued)

	Interesting or appealing	Uninteresting or unappealing	
Anthropologist	1	2	08/
Commercial Artist	1	2	09/
Marriage Counselor	1	2	10/
Television Producer	1	2	11/
Credit Investigator	1	2	12/
Surveyor	1	2	13/
Zoologist	1	2	14/
Free-Lance Writer	1	2	15/
School Principal	1	2	16/
Hotel Manager	1	2	17/
Bank Examiner	1	2	18/
Machinist	1	2	19/
Independent Research Scientist	1	2	20/
Journalist	1	2	21/
Clinical Psychologist	1	2	22/
Sports Promoter	1	2	23/
Tax Expert	1	2	24/

50. Are you currently ...

(Circle one number)

Married	01	(ANSWER A AND B)	25-26/
Living in a marriage-like relationship	02	(ANSWER B)	
Widowed	03	(ANSWER A AND B)	
Divorced	04	(ANSWER A AND B)	
Separated	05	(ANSWER A AND B)	
Never married	06	(GO TO Q. 66)	

IF EVER MARRIED:

A. At what point in your career did your most recent marriage take place?

(Circle one number)

Before medical school	01	27-28/
During medical school	02	
Between medical school and residency	03	
During residency	04	
Between residency and fellowship	05	
During fellowship	06	
After final residency or fellowship completed	07	

B. From your marriage(s) how many children are you responsible for?

(Circle one number)

None	0	29/
One	1	
Two	2	
Three	3	
Four	4	
Five or more	5	

IF YOU ARE NOT CURRENTLY MARRIED, GO TO 65.

61. Did your spouse spend most of his or her childhood in a city with a population greater than 250,000 or within 50 miles of such a city?

(Circle one number)

In a city over 250,000	1	(GO TO Q. 62)	30/
Within 50 miles of a city over 250,000	2	(ANSWER A)	
More than 50 miles from such a city	3	(ANSWER A)	

IF OUTSIDE A CITY OVER 250,000:

A. Which of the following best describes the type of place in which your spouse lived during most of his or her childhood?

(Circle one number)

A medium-sized city between 50,000 and 250,000	1	31/
A small city or town between 25,000 and 50,000	2	
A town between 5,000 and 25,000	3	
A town under 5,000	4	
A rural area	5	

---

62. In what state, possession, or foreign country did your spouse live during most of his or her childhood?

(Circle one code)

Alabama	01	Louisiana	20	Oregon	39	32-33/
Alaska	02	Maine	21	Pennsylvania	40	
Arizona	03	Maryland	22	Puerto Rico	41	
Arkansas	04	Massachusetts . . .	23	Rhode Island	42	
California	05	Michigan	24	South Carolina . . .	43	
Canal Zone	06	Minnesota	25	South Dakota	44	
Colorado	07	Mississippi	26	Tennessee	45	
Connecticut	08	Missouri	27	Texas	46	
Delaware	09	Montana	28	Utah	47	
Washington, D.C. .	10	Nebraska	29	Vermont	48	
Florida	11	Nevada	30	Virginia	49	
Georgia	12	New Hampshire . . .	31	Washington	50	
Hawaii	13	New Jersey	32	West Virginia . . .	51	
Idaho	14	New Mexico	33	Wisconsin	52	
Illinois	15	New York	34	Wyoming	53	
Indiana	16	North Carolina . .	35	Canada	54	
Iowa	17	North Dakota . . .	36	OTHER FOREIGN COUNTRY: SPECIFY _____	55	
Kansas	18	Ohio	37			
Kentucky	19	Oklahoma	38			

63. What is the highest level of education your spouse completed in school. Exclude business or technical school.

(Circle one number)

Less than high school graduate	1	34/
High school graduate	2	
Some college	3	
College graduate	4	
Some post-graduate	5	
Post-graduate degree	6	

---

64. Is your spouse either currently a physician or in training to become a physician?

Yes	1	(GO TO Q. 66)	35/
No	2	(GO TO Q. 66)	

IF YOU ARE CURRENTLY WIDOWED, DIVORCED, OR SEPARATED:

65. When did your marriage end?

1	9			36-37/

66. What was your income for 1980, from your professional work, after deducting office expenses but before deducting retirement contributions and taxes?

(Circle one code)

Less than $20,000	01	38-39/
$20,000 to less than $30,000	02	
$30,000 to less than $40,000	03	
$40,000 to less than $50,000	04	
$50,000 to less than $60,000	05	
$60,000 to less than $70,000	06	
$70,000 to less than $80,000	07	
$80,000 to less than $90,000	08	
$90,000 to less than $100,000	09	
$100,000 to less than $140,000	10	
$140,000 or over	11	

If you wish to receive an individualized profile of your practice to compare with other internists such as yourself, please check the box below.

YES, I would like a profile sent to me ☐ 40/

Please enter the date on which you filled out this section of the questionnaire.

☐☐ Month ☐☐ Day

DEMOGRAPHIC INFORMATION

1. In what year were you born?

ENTER YEAR: | 1 | 9 | | | 41-42/

---

2. What is your sex?

Male 1
Female 2 43/

---

3. In what religion were you raised?

Protestant 1 44/
Catholic 2
Jewish 3
Other (SPECIFY)
_____ 4
None 5

---

4. What race/ethnic group do you consider yourself?

White, non-Hispanic 1 45/
Black, non-Hispanic 2
Hispanic 3
Asian or Pacific Islander 4
American Indian or Alaskan native 5

---

5. When you graduated medical school, were you a citizen of:

United States, Canada or Puerto Rico 1 46/
Some other country (PLEASE SPECIFY)
_____ 2 47-48/

6. In what state, possession or foreign country did you live during most of your childhood?

(Circle one code only)

Alabama	01	Nebraska	29	49-50/
Alaska	02	Nevada	30	
Arizona	03	New Hampshire	31	
Arkansas	04	New Jersey	32	
California	05	New Mexico	33	
Canal Zone	06	New York	34	
Colorado	07	North Carolina	35	
Connecticut	08	North Dakota	36	
Delaware	09	Ohio	37	
District of Columbia (Washington D.C.)	10	Oklahoma	38	
Florida	11	Oregon	39	
Georgia	12	Pennsylvania	40	
Hawaii	13	Puerto Rico	41	
Idaho	14	Rhode Island	42	
Illinois	15	South Carolina	43	
Indiana	16	South Dakota	44	
Iowa	17	Tennessee	45	
Kansas	18	Texas	46	
Kentucky	19	Utah	47	
Louisiana	20	Vermont	48	
Maine	21	Virginia	49	
Maryland	22	Washington	50	
Massachusetts	23	West Virginia	51	
Michigan	24	Wisconsin	52	
Minnesota	25	Wyoming	53	
Mississippi	26	Canada	54	
Missouri	27	OTHER FOREIGN COUNTRY: SPECIFY _____	55	
Montana	28			

---

7. Which of the following categories comes closest to describing the type of place you lived in during most of your childhood?

(Circle one number)

In a city over 250,000	1		51/
Within 50 miles of a city over 250,000	2	(ANSWER A)	
More than 50 miles from a city over 250,000	3	(ANSWER A)	

IF OUTSIDE A CITY OVER 250,000:

A. Which of the following best describes the locality in which you lived during most of your childhood?

(Circle one number)

In a medium-size city between 50,000 and 250,000	1	52/
In a small city or town between 25,000 and 50,000	2	
In a town between 5,000 and 25,000	3	
In a town under 5,000	4	
In a rural area	5	

8. When did you select your medical specialty? That is, when did you decide to concentrate on your present medical specialty as opposed to other specialties.

Before Medical School	1	53/
During Medical School	2	
After Medical School	3	

---

9. Which one of the following has had the greatest influence on your choice of medical specialty?

(Circle one code only)

Medical School faculty	01	54-55/
Housestaff or Fellow at your Medical School hospital	02	
Residency or Fellowship Program faculty	03	
Colleagues: Housestaff or Fellows	04	
Practicing physicians	05	
Members of your family	06	
Other (PLEASE SPECIFY) _____	07	
No person had a substantial impact	08	

10. In making the choice of a residency program which of the reasons below, was the most important, which was the 2nd most important, and which the 3rd most important reason in your deciding to apply to the program you completed?

(Circle one code only in each column)

	Most Important	2nd Most Important	3rd Most Important	
The Residents' caseload level was high.	1	2	3	56/
You wanted to take a fellowship at this hospital	1	2	3	57/
The program had a strong emphasis on primary care medicine	1	2	3	58/
The program had a strong emphasis on subspecialty medicine	1	2	3	59/
You would probably gain admission	1	2	3	60/
The quality of training provided by the program was good	1	2	3	61/
You wanted to practice in the area where the program is located	1	2	3	62/
You grew up in the area where the program is located	1	2	3	63/
Your spouse had a job or was attending a school in the area	1	2	3	64/
Working conditions were good	1	2	3	65/
Other (PLEASE SPECIFY) _____	1	2	3	66/

IF YOU WERE NOT LIVING WITH YOUR FATHER OR SOME OTHER ADULT MALE DURING MOST OF YOUR CHILDHOOD, GO TO Q. 13 IF YOU WERE, ANSWER Q. 11 AND Q. 12.

11. What was the highest grade your father or the male head of the household completed in school? EXCLUDE BUSINESS OR TECHNICAL SCHOOL.

67-68/

Eighth grade or less	01
Some high school	02
High school graduate (12th Grade)	03
Some college	04
College graduate	05
Some post-graduate work	06
Post-graduate degree	07

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12. The U.S. Census divides jobs into ten groups listed below. In which group would you put the job your father or the male head of the household had during most of your childhood?

White Collar	Professional and technical	01	08-09/
	Managers and administrators	02	
	Sales workers	03	
	Clerical workers	04	
Blue Collar and Farm	Craftsmen	05	
	Operatives (e.g., truckdriver)	06	
	Laborers	07	
	Farmers and farm managers	08	
	Farm laborers	09	
	Service workers	10	

IF YOU WERE NOT LIVING WITH YOUR MOTHER OR SOME OTHER ADULT FEMALE DURING MOST OF YOUR CHILDHOOD, GO TO PAGE 41. IF YOU WERE, ANSWER Q. 13 and Q. 14.

13. What was the highest grade your mother or the female head of household <u>completed</u> in school? EXCLUDE BUSINESS OR TECHNICAL SCHOOL.

Eighth grade or less	01	10-11/
Some high school	02	
High school graduate	03	
Some college	04	
College graduate	05	
Some post-graduate work	06	
Post-graduate degree	07	

L-. Did your mother or the female head of the household work full-time or part-time outside the home during most of your childhood?

Full-time work	1	(ANSWER A)	12/
Part-time work	2	(ANSWER A)	
Did not have paid employment	3		

A. In which of the ten Census groups would you put the job your mother or the female head of the household had during most of your childhood?

White Collar	Professional and technical	01	13-14/
	Managers and administrators	02	
	Sales workers	03	
	Clerical workers	04	
Blue Collar and Farm	Craftsmen	05	
	Operatives (e.g., truckdrivers) ..	06	
	Laborers	07	
	Farmers and farm managers	08	
	Farm laborers	09	
	Service workers	10	

Appendix B.

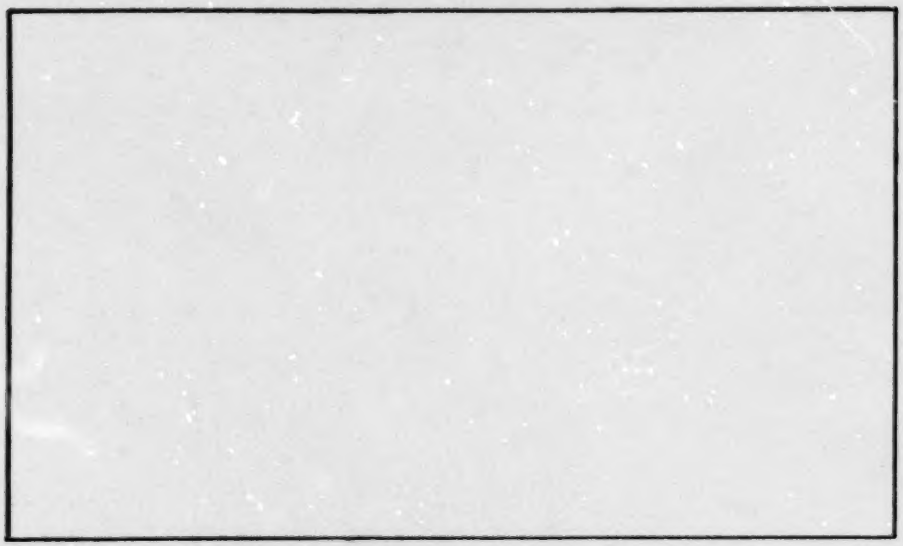
Exhibit 3. The Physician Log-Diary

NORC
4319
7/81

A STUDY OF PHYSICIAN MANPOWER

PART II
QUESTIONNAIRE V

PATIENT ENCOUNTER FORMS

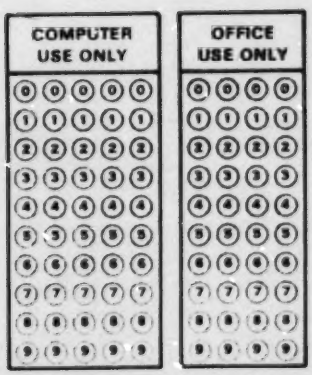


Questionnaire Distributed by
National Opinion Research Center
University of Chicago

ALL INFORMATION IN THIS QUESTIONNAIRE WHICH WOULD PERMIT IDENTIFICATION OF INDIVIDUALS AND INSTITUTIONS WILL BE REGARDED AS STRICTLY CONFIDENTIAL. THIS INFORMATION WILL BE USED ONLY FOR THE PURPOSES OF THE SURVEY AND WILL NOT BE DISCLOSED OR RELEASED TO ANY OTHER GROUP OR INDIVIDUAL. ALL INFORMATION OBTAINED BY THE SURVEY WILL BE GROUPED AND REPORTED ONLY IN STATISTICAL FORM.

PART II

PATIENT ENCOUNTER FORMS



INSTRUCTIONS

OUTPATIENT ENCOUNTER FORMS

The Outpatient Encounter Form is used to describe your face-to-face encounters with nonhospitalized patients, including patients in extended care facilities, during your three Assigned Study Days.

- Do not select other days to record information
- Complete one form for each visit
- If you see the patient more than once during the three days, record each encounter on a separate form
- Record your patients and not the patients which you are supervising care provided by fellows or residents
- If you see your partners' patients, please fill out the patient form answering for yourself, not the other physician

Circle one of the number codes for each question unless otherwise directed in the question.

INSTRUCTIONS FOR SELECTED QUESTIONS

Patient's name: Please record the patient's full name if she/he gives consent to be a part of the special study of patients.

Q. 3: Patient's age- enter the patient's age in years. If less than one year old, enter "0."

Q. 7: In counting the number of times you personally have seen the patient before, count each prior hospitalization as one and each outpatient visit as one. Do not count visits made to other physicians who may be affiliated with you.

Q. 8: An ongoing medical relationship is defined as one in which you personally and the patient have had a doctor-patient relationship in the past and expect to continue in that relationship. If the patient is primarily affiliated with a partner of yours, you should circle answer 3.

Q. 9: Restricted range defines care provided for a limited type of medical problem. For example, if a patient with chronic ischemic heart disease has congestive heart failure, and a rhythmn disturbance and you expect to treat only the heart condition it would be considered code 1...a restricted range. If you expect to also care for the patient's arthritis, diabetes, or upper-respiratory infections you would circle code 2 for the response "most types... ."

Q.10: To arrange or coordinate most of the care you or your staff would actually contact other health professionals for care that the patient needs. If you simply provide the patient with the name of someone to contact, circle code 2 for "no."

Q.14: Main diagnosis...If you addressed more than one medical problem this visit, the main problem is defined as the one that prompted the patient's visit this time. For example, if an upper-respiratory infection is the main problem this visit for a patient you ordinarily treat for chronic ischemic heart disease you should note the upper-respiratory infection here and chronic ischemic heart disease in Q.16 and possibly in Q.17. If the visit consists of a check-up or periodic exam of a well patient, enter "well patient" here and continue to the next question.

Q.16: "List all other diagnoses addressed this visit." Enter here all the other diagnoses you treated during this visit in the order of importance to this patient's health status.

Q.17: Please specify the one diagnosis which is the patient's major health problem whether or not you provide the medical care for that problem. In the above example the chronic ischemic heart disease would be listed here.

Q.18: By "unassisted" we mean without the use of walkers, canes, wheelchairs, or personal helper.

Q.19, 20, & 21: On the back flap of this booklet there is a list of common types of diagnostic tests and therapies with a number for each. Circle the number codes on the encounter form listed in Q.19 for all the tests ordered and in Q.21 for all the therapies ordered or performed during this visit. In Q.20 circle the number code for the tests performed during this visit by you or your staff. If no tests or therapies were ordered or performed, please circle 00 for none.

HOSPITAL INPATIENT ENCOUNTER FORMS

The Inpatient Encounter Form is used to describe the encounters with your hospitalized patients during the three Assigned Study Days.

- Do not select other days to record information
- Complete one form for each patient
- If you see the patient more than once during the three days, record each encounter on the same form

Circle one of the number codes for each question unless otherwise directed in the question.

INSTRUCTIONS FOR SELECTED QUESTIONS

Most questions on the Hospital Inpatient Encounter Form are similar to the Outpatient Encounter Form. The following instructions are different in that we wish to know those tests, procedures, or therapies which you personally performed during the three Assigned Study Days, and those which you ordered to be done by others. The number codes refer to the tests and therapies listed on the back flap of this booklet.

Q.18: Circle the number codes for tests which you ordered but did not personally perform during the three Assigned Study Days.

Hospital Inpatient Encounter Form Instructions (continued)

Q.19: Circle the number code for test which you personally performed at any time during the three days.

Q.20: Circle the number codes for any therapy that you ordered but did not personally perform during these three Assigned Study Days.

Q.21: For the purposes of this study, the "first visit" is your first with this patient during the three day period even if you have seen him/her before these three days.

This form can accommodate up to six visits for the same inpatient during the three Assigned Study Days. After the first visit has been recorded for the patient, questions 1 through 12 do not have to be addressed on subsequent visits.

PLEASE READ MARKING DIRECTIONS ON NEXT PAGE

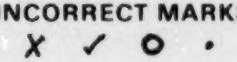
If you have any questions or concerns, call collect to:

Dr. Peter Weil
(312) 947-7404, weekdays 8:30 am to 5:00 pm
(312) 288-1685, all other times

MARKING DIRECTIONS

- Use only a soft black lead pencil (No. 2 is ideal).
- Make heavy dark marks that fill the circle.
- Make no stray marks of any kind on the Patient Encounter forms.
- Where write-in responses are required, please confine your writing to the limitations of the boxes provided.

INCORRECT MARKS



CORRECT MARK

DIAGNOSTIC TESTS

00 None

Blood Counts

01 CBC (or individual counts)
02 Differential
03 Platelet
04 Reticulocytes
05 Sedimentation rate

Blood Tests

06 Automated panel (SMA-12, etc.)
07 Electrolytes or individual chemistries
08 Lipid screen
09 Enzymes

Culture

10 Blood, throat, or other

Urine

11 Urinalysis
12 Urea or creatinine clearance

Radiology

13 Chest
14 Bone(s) or joints
15 Upper GI
16 Gall bladder
17 Colon
18 Pyelogram
19 Mammogram
20 Isotopic scan
21 CAT scan
22 Ultrasound of abdomen

Special Tests or Procedures

23 PAP smear or vaginal smear
24 Stool for blood
25 Bladder catheterization
26 Skin test
27 ECG, ambulatory ECG, rhythm strip
28 Exercise test (stress test)
29 Ultrasound, heart
30 Cardiac catheterization
31 Biopsy, liver, other tissue, or lesion
32 Joint aspiration
33 Bone marrow aspiration
34 Pulmonary function test
35 Endoscopy - lung
36 Endoscopy - upper gastrointestinal
37 Endoscopy - colon
38 Endoscopy - proctosigmoidoscopy
39 Other

THERAPY

00 None

Prescriptions/Orders/Infusions

40 Drugs
41 Contraceptives, pills or devices
42 Intravenous fluids
43 Transfusion, blood or products
44 Immunization

Other Tx

45 Ear Irrigation
46 Physical therapy/rehabilitation
47 Para- or thoracentesis
48 Suturing and suture removal
49 Incision and drainage
50 Vasectomy
51 Application of ace wrap, sling, collar, and splint
52 Cast application or removal
53 Dilatation and curettage or IUD and diaphragm placement
54 Endometrial biopsy

Counseling

55 Growth and development
56 Family conflict/social maladjustment
57 Sexual
58 Exercise
59 Diet
60 Smoking
61 Therapeutic listening/reassurance
62 Extended discussion (and 5 minutes) or treatment program
63 Other

PLEASE READ TO ALL OUTPATIENTS:

During this week, I am participating in a national study of health care manpower and this study includes a special study of patients. I am asking all my outpatients for their consent to include their names in a "pool" of participants for the patient study. A small number of my patients will be chosen at random and will receive a short confidential questionnaire through the mail. Your participation in this study is voluntary and will not affect your medical care or involve access to your medical records. But your help will be an important contribution to understanding the medical care needs of the nation. May I include your name in the pool of participants?

IF PATIENT AGREES, PRINT PATIENT'S NAME ON THE PATIENT PERSONAL ENCOUNTER FORM.

DIAGNOSTIC TESTS

00 None

Blood Counts

01 CBC (or individual counts)
02 Differential
03 Platelet
04 Reticulocytes
05 Sedimentation rate

Blood Tests

06 Automated panel (SMA-12, etc.)
07 Electrolytes or individual chemistries
08 Lipid screen
09 Enzymes

Culture

10 Blood, throat, or other

Urine

11 Urinalysis
12 Urea or creatinine clearance

Radiology

13 Chest
14 Bone(s) or joints
15 Upper GI
16 Gall bladder
17 Colon
18 Pyelogram
19 Mammogram
20 Isotopic scan
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23 PAP smear or vaginal smear
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29 Ultrasound, heart
30 Cardiac catheterization
31 Biopsy, liver, other tissue, or lesion
32 Joint aspiration
33 Bone marrow aspiration
34 Pulmonary function test
35 Endoscopy - lung
36 Endoscopy - upper gastrointestinal
37 Endoscopy - colon
38 Endoscopy - proctosigmoidoscopy
39 Other

THERAPY

00 None

Prescriptions/Orders/Infusions

40 Drugs
41 Contraceptives, pills or devices
42 Intravenous fluids
43 Transfusion, blood or products
44 Immunization

Other Rx

45 Ear Irrigation
46 Physical therapy/rehabilitation
47 Para- or thoracentesis
48 Suturing and suture removal
49 Incision and drainage
50 Vasectomy
51 Application of ace wrap, sling, collar, and splint
52 Cast application or removal
53 Dilatation and curettage or IUD and diaphragm placement
54 Endometrial biopsy

Counseling

55 Growth and development
56 Family conflict/social maladjustment
57 Sexual
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60 Smoking
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PLEASE READ TO ALL OUTPATIENTS:

During this week, I am participating in a national study of health care manpower and this study includes a special study of patients. I am asking all my outpatients for their consent to include their names in a "pool" of participants for the patient study. A small number of my patients will be chosen at random and will receive a short confidential questionnaire through the mail. Your participation in this study is voluntary and will not affect your medical care or involve access to your medical records. But your help will be an important contribution to understanding the medical care needs of the nation. May I include your name in the pool of participants?

IF PATIENT AGREES, PRINT PATIENT'S NAME ON THE PATIENT PERSONAL ENCOUNTER FORM.

HOSPITAL INPATIENT ENCOUNTER FORM

DO NOT USE

Patient Initials	Number

COMPLETE Q. 1 THROUGH Q. 12 ONCE FOR THE PATIENT.

COMPLETE Q. 13 THROUGH Q. 22 FOR EACH VISIT.

1. **Patient's Age** → ☐☐

2. **Patient's Sex**
   - ◯ Male
   - ◯ Female

3. **Patient's Race or Ethnicity**
   - ◯ White (non-Hispanic)
   - ◯ Black (non-Hispanic)
   - ◯ Hispanic
   - ◯ Asian or Pacific Islander
   - ◯ American Indian or Alaskan Native

4. **Have you cared for this patient prior to this hospitalization?**
   - ◯ Yes
   - ◯ No → (Go to Q. 7)

5. **How many times have you seen this patient in the 12 months prior to this hospitalization?** → ☐☐

6. **Do you have an ongoing medical relationship with this patient?**
   - ◯ Yes
   - ◯ No
   - ◯ Partner's patient

7. **Which better describes the range of medical problems for which you expect to treat this patient?**
   - ◯ A restricted range of medical problems this patient may have
   - ◯ Most types of medical problems this patient may have

8. **Will you or your staff arrange health care for this patient that you do not provide?**
   - ◯ Yes
   - ◯ No

9. **When not in the hospital, is this patient under the outpatient care of other physicians?** (Mark all that apply)
   - ◯ No
   - ◯ Yes, a general physician
   - ◯ Yes, an ob/gyn
   - ◯ Yes, a psychiatrist
   - ◯ Yes, another kind of specialist
   - ◯ Don't know

10. **Are you a consultant to another physician on the care of this patient?**
    - ◯ Yes
    - ◯ No

11. **Do you provide medical care for other members of this patient's family?** (Mark all that apply)
    - ◯ No
    - ◯ Yes, spouse
    - ◯ Yes, children
    - ◯ Yes, parents
    - ◯ Yes, other members

12. **Expected major source of payment for this hospitalization?** (Mark one only)
    - ◯ Patient or family
    - ◯ Private insurance
    - ◯ Medicare
    - ◯ Medicaid or other public funds
    - ◯ Prepaid plan
    - ◯ VA/Military
    - ◯ Other

13. **Consultation or referral during these three days?** (Mark all that apply)
    - ◯ None
    - ◯ Returned to referral source
    - ◯ Medical specialist
    - ◯ Pediatrician
    - ◯ Ob/Gyn
    - ◯ Surgical specialist
    - ◯ Psychiatrist/psychologist
    - ◯ Home health agency
    - ◯ Other

14. **Which of the following were part of this patient's care during these three days?** (Mark all that apply)
    - ◯ Urinary catheter
    - ◯ Intravenous lines
    - ◯ Cardiac monitor
    - ◯ Endotracheal tube and ventilator
    - ◯ Endotracheal tube alone
    - ◯ ICU or CCU
    - ◯ None of these

15. **Major diagnosis or problem addressed this hospitalization:**

16. **List all other diagnoses addressed this hospitalization:**

17. **What is the patient's major health problem?**

18. **Tests ordered these three days:** (Mark all that apply)

    00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
    25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

19. **Which of the following tests did you yourself perform these three days?** (Mark all that apply)

    00 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

20. **Therapy ordered these three days:** (Mark all that apply)

    00 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

ANSWER EVEN IF YOU SEE THE PATIENT SEVERAL TIMES IN A SINGLE DAY.

	1st Visit	2nd Visit	3rd Visit	4th Visit	5th Visit	6th Visit
21. Day of Week (Mark one in each box) →	M T W	M T W	M T W	M T W	M T W	M T W
22. How many minutes did you spend face-to-face with this patient on this visit? →	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

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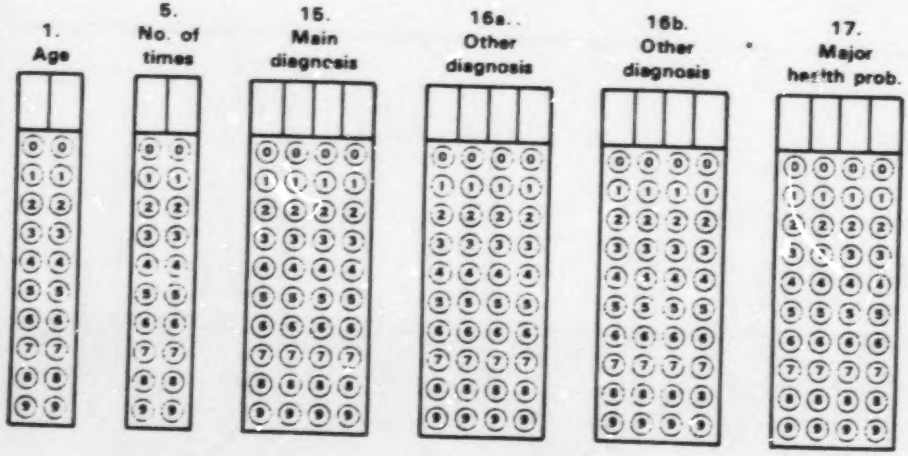
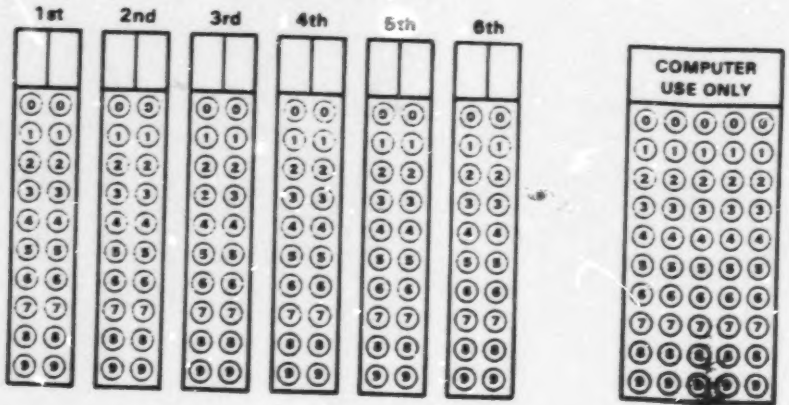
217



22. No. of minutes



OUTPATIENT ENCOUNTER FORM

DO NOT USE

Patient Initials	Number

Is this patient medically able to participate in the patient study?

◯ Yes ◯ No

↓

Read the description of the patient study on the booklet flap to each outpatient.

If the patient agrees to be included, print the patient's full name here →

1. Day of Week
- ◯ Monday
- ◯ Tuesday
- ◯ Wednesday

2. Location of Visit
- ◯ Office
- ◯ OPD
- ◯ ER
- ◯ Extended care facility
- ◯ Other

3. Patient's Age → ☐☐

4. Patient's Sex
- ◯ Male
- ◯ Female

5. Patient's Race or Ethnicity
- ◯ White (non-Hispanic)
- ◯ Black (non-Hispanic)
- ◯ Hispanic
- ◯ Asian or Pacific Islander
- ◯ American Indian or Alaskan Native

6. Have you seen this patient before?
- ◯ Yes
- ◯ No → (Go to Q. 9)

7. How many times have you seen this patient in the last 12 months, counting this visit? → ☐☐

8. Do you have an ongoing medical relationship with this patient?
- ◯ Yes
- ◯ No
- ◯ Partner's patient

9. Which better describes the range of medical problems for which you expect to treat this patient?
- ◯ A restricted range of the medical problems this patient may have
- ◯ Most types of medical problems this patient may have

10. Will you or your staff arrange health care for this patient that you do not provide?
- ◯ Yes
- ◯ No

11. Is this patient under the care of other physicians? (Mark all that apply)
- ◯ No
- ◯ Yes, a general physician
- ◯ Yes, an ob/gyn
- ◯ Yes, a psychiatrist
- ◯ Yes, another kind of specialist
- ◯ Don't know

12. Is this visit a consult requested by another physician?
- ◯ Yes
- ◯ No

13. Do you provide medical care for other members of this patient's family? (Mark all that apply)
- ◯ No
- ◯ Yes, spouse
- ◯ Yes, children
- ◯ Yes, parents
- ◯ Yes, other members

14. Main diagnosis or problem addressed this visit:

15. Is this the patient's first visit for the problem in Q. 14? ◯ Yes ◯ No

16. List all other diagnoses addressed this visit:

17. What is the patient's major health problem?

18. Which is the most strenuous activity this patient can usually perform unassisted?
- ◯ Run 1 mile or vigorous sports
- ◯ Run 50 yards
- ◯ Climb two flights of stairs
- ◯ Walk 4 blocks outdoors
- ◯ Walk 1 block outdoors
- ◯ None of these, housebound

19. Tests ordered this visit: (Mark all that apply)

00
01 02 03 04 05 06 07 08 09 10 11 12
13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32 33 34 35 36

20. Which of the following tests did you or your staff perform this visit? (Mark all that apply)

00 25 26 27 28 29 30 31 32 33 34 35
36 37 38 39

21. Therapy ordered this visit: (Mark all that apply)

00
40 41 42 43 44 45 46 47 48 49 50 51
52 53 54 55 56 57 58 59 60 61 62 63

22. Your next planned contact with this patient:
- ◯ None planned
- ◯ Telephone follow-up
- ◯ Outpatient visit if needed
- ◯ Outpatient visit scheduled
- ◯ In hospital
- ◯ Extended care facility
- ◯ Other

23. Consultation or referral at end of visit:
- ◯ None
- ◯ Returned to referral source
- ◯ Medical specialist
- ◯ Pediatrician
- ◯ Ob/Gyn
- ◯ Surgical specialist
- ◯ Psychiatrist/psychologist
- ◯ Home health agency
- ◯ Other

24. Expected major source of payment for visit: (Mark one only)
- ◯ Patient or family
- ◯ Private insurance
- ◯ Medicare
- ◯ Medicaid or other public funds
- ◯ Prepaid plan
- ◯ VA/Military
- ◯ Other

25. How many minutes did you spend face-to-face with this patient on this visit? → 220 ☐☐ MINUTES

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219

3. Age

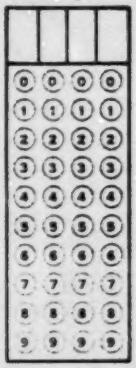
7. No. of times

14 Main diagnosis

16a. Other diagnosis

16b. Other diagnosis

17. Major health prob.



25. Minutes

COMPUTER USE ONLY

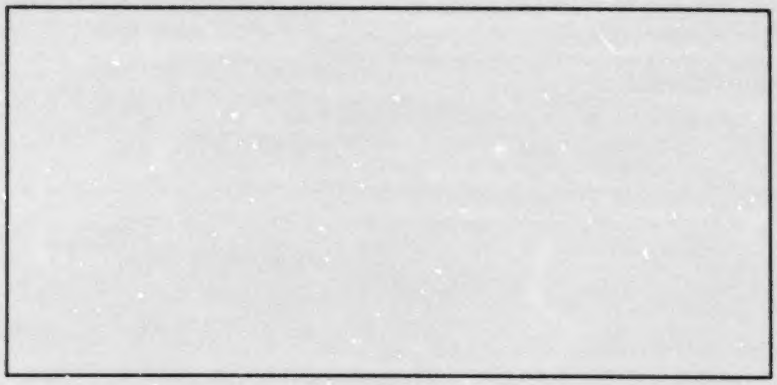
Appendix B.

Exhibit 4. The Patient Questionnaire

CONFIDENTIAL
OMB #0935-0057
Exp. 8/31/82

4319
10/81

SPECIAL STUDY OF PATIENTS



☐☐☐☐ 1-4/

☐☐ 5-6/

7-10/R

The answers you give to this questionnaire are an important contribution to research. No information which would identify you as an individual will be published or released. This information will be kept strictly confidential and will not be shown to your doctor or any individual. Your answers will be combined with the answers of other people like yourself for analysis and publication.

If you have any questions or problems filling out this questionnaire, please call the Study Director, Dr. Peter Weil, collect at his office, (312) 947-7404.

On the day you complete this questionnaire, please return it, using the preaddressed envelope provided.

Questionnaires distributed and collected by:

National Opinion Research Center
University of Chicago
6030 South Ellis Avenue
Chicago, Illinois 60637

INSTRUCTIONS

If the patient is a child, the questionnaire should be completed by a responsible adult familiar with the visit to the physician and, if possible, the adult who was present during the office visit.

Please read each question carefully.

Circle the number of the ONE answer that best fits you. We have circled some answers, on this and the following page, just as examples.

EXAMPLE 1:

18. Do you plan to continue seeing this doctor for medical care?

Yes ..... (1)
No 2
Don't know..... 3

Some questions have several parts. In these cases, you should circle one number on each line.

EXAMPLE 2:

12. During this visit, did the doctor or someone else in the office do or order any of the following:

(Circle one on each line.)

	Yes	No
your blood pressure	(1)	2
a blood sample	1	(2)
a urine sample	1	(2)
an injection	1	(2)
an x-ray	(1)	2

IF YOU ARE NOT CURRENTLY MARRIED, PLEASE GO TO Q. 36.

34. What was the highest level your spouse completed in school?

Do not count vocational or technical school.

Eighth grade or less.....	01	49-50/
Some high school.....	02	
High school graduate.....	03	
Some college.....	04	
College graduate.....	05	
Some post-graduate work.....	06	
Post-graduate degree.....	07	

---

35. Last week, was your spouse ...

(Circle one. If more than one response applies, circle the lowest number that applies.)

Working full time.....	01	51-52/
Working part time.....	02	
With a job, but not at work due to temporary illness, vacation, or strike.....	03	
Unemployed, laid off, or looking for work.....	04	
Retired.....	05	
In school.....	06	
Keeping house.....	07	
Other.....	96	

---

36. In what year were you born?

53-55/

_____
Year of your birth

---

37. What is your sex?

Female.....	1	56/
Male.....	2	

38. In what religion were you raised?

(Circle one.)

Protestant.....	1	57/
Catholic.....	2	
Jewish.....	3	
Other (PLEASE SPECIFY) _____	4	
None.....	5	

---

39. What race or ethnicity do you consider yourself?

(Circle one.)

White (non-Hispanic).....	1	58/
Black (non-Hispanic).....	2	
Hispanic.....	3	
Asian or Pacific Islander.....	4	
American Indian or Alaskan Native.....	5	

---

40. How long have you lived in this community?

59-60/

☐☐ Years ☐☐ Months 61-62/

---

41. How long does it usually take you to travel from your home to this doctor's office door to door?

(Circle one.)

0 to 15 minutes.....	1	63/
15 to 30 minutes.....	2	
At least 1/2 hour, but less than 1 hour.....	3	
At least 1 hour, but less than 1 1/2 hours.....	4	
1 1/2 hours or longer.....	5	

BEGIN DECK 11

REMEMBER: In this questionnaire "you" refers to the patient named on the cover label.

1. Would you say your own health, in general, is ...

(Circle one.)

Excellent	1	11/
Good	2	
Fair	3	
Poor	4	

---

2. Over the past year, has your health caused you ...

(Circle one.)

A great deal of worry	1	12/
Some worry	2	
Hardly any worry	3	
No worry at all	4	

3. Are you currently receiving care from any other physician in addition to the doctor named on the cover of this questionnaire?

Yes ..... 1 (ANSWER Q. 3-A)

No ..... 2 (GO TO Q. 4) 13/

IF YES:

Q3-A. Circle either 1 (yes) or 2 (no) for each category of physician listed below. Circle the number "1" if you ARE under the care of that kind of doctor. Circle the number "2" if you ARE NOT under the care of that kind of doctor.

DO NOT include the doctor named on the cover of the questionnaire.

(Circle one on each line.)

	Yes	No	
a general physician, such as a general/ family physician, general internist, or general pediatrician?	1	2	14/
a medical specialist, such as an allergist, dermatologist, cardiologist or heart specialist, gastroenterologist or stomach/intestinal specialist?	1	2	15/
a surgical specialist, such as a general surgeon; ear, nose, throat specialist; orthopedic surgeon; ophthalmologist; or urologist?	1	2	16/
a psychiatrist?	1	2	17/
an obstetrician - gynecologist?	1	2	18/

4. Is there a particular clinic, health center, doctor's office, or other place that you usually go to if you are sick or need advice about your health?

Yes ..... 1 (ANSWER Q. 4-A)

No ..... 2 (GO TO Q. 6) 19/

IF YES:
Q4-A. What kind of place is it?

(Circle one.)

A health center 01 20-21/

A hospital emergency room 02

A hospital outpatient clinic 03

Some other kind of clinic 04

A doctor's office 05

Some other place (PLEASE SPECIFY)

_____ 06

---

5. Do you usually see the same doctor each time you go to that place?

Yes ..... 1 (ANSWER Q. 5-A)

No ..... 2 (GO TO Q. 6) 22/

IF YES:
Q5-A. Is this the doctor named on the cover of the questionnaire?

Yes ..... 1 (GO TO Q. 6)

No ..... 2 (ANSWER Q. 5-B) 23/

Q5-B. Is the doctor you usually see a partner of (that is, a physician who practices together with) the doctor named on the cover of this questionnaire?

Yes 1 24/

No 2

6. Which members of your family also go to the doctor named on the cover of the questionnaire? Circle "1" (Yes) or "2" (No) for each family member listed below.

If your family does not include one of the members listed, or if he or she lives out of the area, circle "3" (Not applicable).

(Circle one on each line.)

	Yes	No	Not applicable	
Your husband or wife?	1	2	3	25/
Your children?	1	2	3	26/
Your parents?	1	2	3	27/
Other family members?	1	2	3	28/

Questions 7-15 are <u>about the visit you made to the doctor on the date shown on the cover of this questionnaire</u>. Please think about <u>only</u> that visit when you answer these questions.

7. A consultation visit allows one doctor to examine a patient and report the findings to the physician who requested the consultation.

Was this visit part of a consultation requested by another physician?

Yes	1	(ANSWER Q. 7-A)	29/
No	2	(GO TO Q. 8)	

<u>IF YES</u>:

Q7-A. At the end of this visit, did the doctor suggest that you return to the physician who requested the consultation?

Yes	1	30/
No	2	

---

8. Was the visit shown on the cover of this questionnaire your <u>first</u> visit to this doctor?

Yes	1	(GO TO Q. 9)	31/
No	2	(ANSWER Q. 8-A)	

<u>IF NO</u>:

Q8-A. When was your first visit to this doctor?

If you don't remember exactly, give your best guess.

32-33/

Month	Year
☐☐	☐☐

34-35/

9. Did you have an appointment for this visit, or did you just walk in?

(Circle one.)

Made an appointment at least one day before the visit.....	1	(ANSWER Qs. 9-A & 9-B)	36/
Called for an appointment the day of the visit.....	2	(GO TO Q. 10)	
Walked in without an appointment.....	3	(GO TO Q. 10)	

Q9-A. How long before this visit was the appointment made?

(Circle one.)

Less than 1 week.....	1	37/
At least 1 week, but less than 2 weeks.....	2	
At least 2 weeks, but less than 3 weeks.....	3	
At least 3 weeks, but less than 4 weeks.....	4	
At least 4 weeks.....	5	

Q9-B. How satisfied were you with waiting this long for your appointment?

Were you ... (Circle one.)

Completely satisfied.....	1	38/
Very satisfied.....	2	
Moderately satisfied.....	3	
Slightly satisfied.....	4	
Not at all satisfied.....	5	

---

10. How long did you wait in the doctor's office before you saw the doctor on this visit?

☐☐☐ Minutes 39-41/

---

11. How many minutes did you actually spend face-to-face with the doctor during this visit?

☐☐☐ Minutes 42-44/

12. During this visit, did your doctor or someone else in the office do or order any of the following:

(Circle one on each line.)

	Yes	No	
your blood pressure	1	2	45/
a blood sample	1	2	46/
a urine sample	1	2	47/
an injection	1	2	48/
an x-ray	1	2	49/
an electrocardiogram	1	2	50/
WOMEN ONLY: a Pap smear	1	2	51/

13. At the end of the visit, what arrangements did you make to see this doctor again?

(Circle one.)

No arrangements were made..... 01 52-53/

You were asked to telephone the doctor's office later for advice or consultation..... 02

You were asked to return to the doctor's office or clinic if necessary..... 03

You made a return appointment before leaving the office or clinic that day..... 04

The doctor planned to see you when you were admitted to the hospital..... 05

The doctor planned to see you at a nursing home or convalescent facility..... 06

The doctor planned to see you at some other place (such as your home or a hospital emergency room)..... 07

14. During this visit, did the doctor ask you to see another physician or health professional for a consultation or for care?

Yes	1	(ANSWER Qs. 14-A & 14-B)	54/
No	2	(GO TO Q. 15)	

IF YES:

Q14-A. What kind of physician or health professional did the doctor ask you to to see?

(Circle all that apply.)

A general physician, such as a general/family physician or a general internist	1	55/
A medical specialist, such as an allergist, dermatologist, cardiologist or heart specialist, gastroenterologist or intestinal specialist	2	56/
A surgical specialist, such as a general surgeon; ear, nose, throat specialist; orthopedic surgeon; ophthalmologist; or urologist	3	57/
A pediatrician	4	58/
A nurse practitioner	5	59/
A psychiatrist or psychologist	6	60/
A dietician	7	61/
A home health agency	8	62/
An obstetrician - gynecologist	9	63/
Other	0	64/

Q14-B. How did the doctor named on the cover of this questionnaire arrange for you to see the physician(s) or health professional(s) in Question 14-A?

Did he or she ... (Circle all that apply.)

Give you the name and phone number and ask <u>you</u> to make an appointment	1	65/
Phone or otherwise contact the other health professional for you	2	66/
Ask the nurse or other office staff to make an appointment for you	3	67/

15. Who will pay the major cost of this visit?

(Circle one.)

Yourself or your family	01	68-69/
Private insurance, such as Blue Cross/ Blue Shield	02	
Medicare	03	
Medicaid or other public funds (such as a state clinic)	04	
Prepaid plan, such as a health maintenance organization	05	
Veterans' Administration or Military	06	
Other (PLEASE SPECIFY) _____		
_____	07	

Q15-A. Did you feel the cost was reasonable?

Yes	1	70/
No	2	
No Opinion	3	

BEGIN DECK 12

Questions 16-28 are about your overall experience with this doctor, and not about any one visit in particular. Please think about all the visits you have made to this doctor when you answer these questions.

16. Who referred you to this doctor the first time you saw him or her?

(Circle one.)

You yourself, family, friends or coworkers..... 01 11-12/

An agency, for example, a medical society, family planning clinic, hospital emergency room, department of social welfare..... 02

Another physician sent you to this doctor for a consultation (a consultation visit allows one doctor to examine a patient and report the findings to the physician who requested the consultation)..... 03

Another physician referred you to this doctor for continuing care..... 04

A pharmacist..... 05

A nurse practitioner..... 06

Another source, such as the phone book..... 07

Q17-A. How many times have you visited this doctor in the past 12 months? Count the visit shown on the cover of the questionnaire, but do not count visits after that date. Do not count hospitalizations.

☐☐ Visits 13-14/

Q17-B. How many times were you admitted to the hospital during the past 12 months, during which this doctor visited you?

☐☐ Admissions 15-16/

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18. Do you plan to continue seeing this doctor for medical care?

Yes 1 17/

No 2

Don't Know..... 3

19. Think about your past experience with this doctor and the relationship you expect to have with him or her in the future.

Based on this, do you expect this doctor to treat you for ...

(Circle one.)

Most types of medical problems which you may develop in the future.....	1	18/
Only a few types of medical problems which you may develop in the future.....	2	
You have no plans to see this doctor in the future.....	3	

20. Has this doctor or the office staff ever helped you arrange to see any of the following ...

(Circle one on each line.)

	Yes	No	
Another doctor for care or evaluation	1	2	19/
Someone who was not a physician, such as a dentist, psychologist, or social worker	1	2	20/

21. Do you think that this doctor or this doctor's staff will directly contact other physicians or health personnel to arrange for care you need that this doctor does not provide? If this doctor would simply provide you with the name or phone number of another doctor, circle 2.

Yes	1	21/
No	2	

22. Following are some statements about medical care. Please read each one carefully, keeping in mind the medical care you have received from this doctor, even if you have seen him or her only once.

On the line next to each statement, circle the number for the opinion which is closest to your own view.

Some statements look similar to others, but each statement is different. You should consider each statement by itself.

This is not a test of what you know. There are no right or wrong answers. We are only interested in your opinion or best impression.

Remember, your answers will be kept strictly confidential. Your doctor will never see your answers to these questions.

(Circle only one number on each line.)

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	
I'm very satisfied with the medical care I receive from this doctor.	1	2	3	4	5	22/
This doctor is not as thorough as he or she should be.	1	2	3	4	5	23/
If I have a medical question, I can reach this doctor for help without any problem.	1	2	3	4	5	24/
This doctor always does his or her best to keep me from worrying.	1	2	3	4	5	25/
This doctor encourages me to get a yearly exam.	1	2	3	4	5	26/
It's hard to get an appointment with this doctor right away.	1	2	3	4	5	27/
The care I have received from this doctor is just about perfect.	1	2	3	4	5	28/

22. (Continued)

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	
This doctor is very careful to check everything when examining me.	1	2	3	4	5	29/
This doctor always treats me with respect.	1	2	3	4	5	30/
This is not the doctor I usually see when I go for medical care.	1	2	3	4	5	31/
I hardly ever see this doctor when I go for medical care.	1	2	3	4	5	32/
Sometimes this doctor makes me feel foolish.	1	2	3	4	5	33/
This doctor causes me to worry a lot because he or she doesn't explain medical problems to me.	1	2	3	4	5	34/
This doctor could give better medical care.	1	2	3	4	5	35/
This doctor asks what foods I eat and explains why certain foods are best.	1	2	3	4	5	36/
This doctor ignores medical problems I've had in the past when I seek care for new problems.	1	2	3	4	5	37/
This doctor respects my feelings.	1	2	3	4	5	38/

22. (Continued)

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	
There are things about the medical care I receive from this doctor which could be better.	1	2	3	4	5	39/
This doctor hardly ever explains my medical problems to me.	1	2	3	4	5	40/
I see this doctor just about every time I go for medical care.	1	2	3	4	5	41/
This doctor doesn't explain about ways to avoid illness or injury.	1	2	3	4	5	42/

23. Please look at the six items listed below. Circle the number of the most strenuous activity you can usually perform unassisted.

(Circle one only.)

Run 1 mile or do vigorous sports 1 43/

Run 50 yards, for example, half the length of a football field 2

Climb 2 flights of stairs 3

Walk 4 blocks outdoors 4

Walk 1 block outdoors 5

None of these, confined to house..... 6

24. For the following activities, base your answer on whether you can usually do each activity without help from others:

(Circle one item on each line.)

	Yes	No	
Do you need help eating, dressing, bathing or using the toilet?	1	2	44/
Does your health keep you from working at a job, doing work around the house or going to school?	1	2	45/
Are you unable to do certain kinds of work, housework or schoolwork because of your health?	1	2	46/
Are you able to do hard activities at home like scrubbing floors or moving heavy furniture?	1	2	47/

25. How have you been feeling in general during the last 4 weeks?

(Circle one.)

In excellent spirits	01	48-49/
In very good spirits	02	
In good spirits mostly	03	
I have been up and down in spirits a lot	04	
In low spirits mostly	05	
In very low spirits	06	

26. Has this doctor ever discussed cigarette smoking with you?

Yes	1	(ANSWER Qs. 26-A, 26-B & 26-C)	50/
No	2	(GO TO Q. 27 ON PAGE 18)	

Q26-A. What did the doctor discuss with you?

Did the doctor ... (Circle one on each line.)

	Yes	No	
encourage you to continue to avoid smoking?	1	2	51/
encourage you to stop smoking?	1	2	52/
discuss the dangers of smoking?	1	2	53/
talk about your smoking to your family?	1	2	54/
recommend exercise?	1	2	55/
tell you specific steps to take in stopping smoking?	1	2	56/
give you pamphlets about smoking?	1	2	57/
refer you to a program to help you stop smoking?	1	2	58/
talk to you about your feelings about smoking?	1	2	59/
encourage you to change to a low tar cigarette or cigar or pipe?	1	2	60/

Q26-B. Since you have been seeing this doctor, how often has the doctor talked with you about smoking?

(Circle one.)

The first visit only.....	1	61/
Every few visits or so.....	2	
Almost every visit.....	3	
Every time I see the doctor.....	4	

Q26-C. When the doctor talked with you about smoking, how much time did he or she spend talking about smoking?

(Circle one.)

Up to 2 minutes.....	1	62/
2 to 5 minutes.....	2	
5 to 10 minutes.....	3	
More than 10 minutes.....	4	

27. Has this doctor ever discussed exercise with you?

Yes	1	(ANSWER Qs. 27-A, 27-B & 27-C)	63/
No	2	(GO TO Q. 28 ON PAGE 20)	

Q27-A. What did the doctor discuss with you?

Did the doctor ... (Circle one on each line.)

	Yes	No	
discuss the benefits of good exercise and encourage you to <u>continue</u> to exercise?	1	2	64/
discuss the benefits of good exercise and encourage you to <u>increase</u> your exercise?	1	2	65/
discuss exercise with your family to get their help?	1	2	66/
give you pamphlets about exercise?	1	2	67/
recommend specific exercises?	1	2	68/
suggest you join an athletic club?	1	2	69/
discuss your feelings about exercise?	1	2	70/

Q27-B. Since you have been seeing this doctor, how often has the doctor talked to you about exercise?

(Circle one.)

The first visit only.....	1	71/
Every few visits or so.....	2	
Almost every visit.....	3	
Every time I see the doctor.....	4	

Q27-C. When the doctor talked with you about exercise, how much time did he or she spend talking about exercise?

(Circle one.)

Up to 2 minutes.....	1	72/
2 to 5 minutes.....	2	
5 to 10 minutes.....	3	
More than 10 minutes.....	4	

BEGIN DECK 13

28. Below is a list of symptoms people commonly have.

For each symptom, please circle the number "1" in the first column if you had the symptom in the last year, or circle the number "2" if you did not have the symptom in the last year.

Then, for each symptom you answered yes (circled 1), circle 1, 2 or 3 in the right-hand column to indicate whether you visited this doctor, another doctor, or no doctor about the symptom.

	Did you have this symptom in the last year?		FOR EACH SYMPTOM YOU HAD IN THE LAST YEAR: Did you visit this doctor, another doctor, or no doctor about the symptom?	
A cough without fever, which lasted at least 3 weeks	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	12/
	No 2	11/		
A sore throat or cold, with fever, lasting more than 3 days	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	14/
	No 2	13/		
A weight loss of more than 10 pounds (unless you were dieting)	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	16/
	No 2	15/		
Backaches	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	18/
	No 2	17/		
Shortness of breath with light exercise or light work	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	20/
	No 2	19/		
Chest pain when exercising	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	22/
	No 2	21/		
A cough without fever, which lasted for less than a week	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	24/
	No 2	23/		

28. (Continued)

	Did you have this symptom in the last year?		FOR EACH SYMPTOM YOU HAD IN THE LAST YEAR: Did you visit this doctor, another doctor, or no doctor about the symptom?	
Loss of consciousness, fainting, or passing out	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	26/
	No 2	25/		
Acid indigestion or heartburn after many meals	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	28/
	No 2	27/		
Possible sprained muscle	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	30/
	No 2	29/		
Stomach "flu" or virus with vomiting or diarrhea	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	32/
	No 2	31/		
Any infections, irritations, or pains in the eyes or ears	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	34/
	No 2	33/		
Feeling sad or depressed most of the time	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	36/
	No 2	35/		
Possible broken bone	Yes ... 1 →		Visited this doctor..... 1 Visited another doctor.. 2 Did not visit a doctor.. 3	38/
	No 2	37/		

29. Did you have a complete physical examination in the last 12 months?

Yes, from this doctor..... 1 39/

Yes, from another doctor..... 2

No..... 3

The last set of questions asks for background information, so that your answers can be combined with those of other persons like yourself.

30. Are you currently ...

Married	01	40-41/
Widowed	02	
Divorced	03	
Separated	04	
Living in a marriage-like relationship	05	
Never married	06	

---

31. How many children do you have?

None	0	42/
One	1	
Two	2	
Three	3	
Four	4	
Five or more	5	

32. What was the highest level you completed in school?

Do not count vocational or technical school.

Eighth grade or less	01	43-44/
Some high school	02	
High school graduate	03	
Some college	04	
College graduate	05	
Some post-graduate work	06	
Post-graduate degree	07	

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33. Last week, were you ...

(Circle one. If more than one response applies, circle the lowest number that applies.)

Working full time	01	(ANSWER Q. 33-A)	45-46/
Working part time	02	(ANSWER Q. 33-A)	
With a job, but not at work due to temporary illness, vacation, or strike	03	(ANSWER Q. 33-A)	
Unemployed, laid off, or looking for work	04	(ANSWER Q. 33-A)	
Unemployed or laid off due to health reasons	05	(ANSWER Q. 33-A)	
Retired	06	(ANSWER Q. 33-A)	
In school	07	(GO TO Q. 34)	
Keeping house	08	(GO TO Q. 34)	
Other	96	(GO TO Q. 34)	

ANSWER Q. 33-A IF YOU CIRCLED 1, 2, 3, 4, 5, OR 6 IN Q. 33.
OTHERWISE, GO TO Q. 34.

Q33-A. The U.S. Census divides jobs into ten groups according to the kind of work people do. Here is a list of job categories and examples of each.

Please read the list carefully and circle the number of the category which comes closest to describing your job.

If you have more than one job, answer about your main job.

If you are unemployed, laid off, looking for work, or retired, answer about the last job you had.

(Circle one.)

CLERICAL WORKER such as a secretary, bank teller, mail carrier, typist, cashier, office machine operator, dispatcher.....	01	47-48/
FARMER, RANCHER, vegetable or fruit grower.....	02	
MANAGER, OR ADMINISTRATOR of a company, bank, or government office, or OWNER of a small business, company executive.....	03	
SALES AGENT such as a company sales representative, real estate salesman, insurance agent, department store sales clerk.....	04	
SKILLED TRADE OR CRAFT such as a carpenter, chef, plumber, auto mechanic, baker, electrician, shop foreman.....	05	
PROFESSIONAL OR TECHNICAL such as a doctor, teacher, army officer, nurse, artist, medical laboratory technician, pilot, draftsman.....	06	
EQUIPMENT OPERATOR such as an assembly worker in a factory, truck or bus driver, manufacturing inspector, sewing machine operator..	07	
PROTECTIVE SERVICES such as police or fireman, soldier, sailor, airman, watchman.....	08	
LABORER such as construction worker, freight handler, warehouseman, general labor, farm worker, stockhandler, lumberman.....	09	
SERVICE WORKER such as an airline stewardess, waiter, nursing aide, maid, hospital attendant janitor, hair stylist.....	10	
DON'T KNOW.....	98	

Follow any instructions which appear at the beginning of a question or next to the number you circled which tell you the question you should answer next. These instructions will help make sure that you skip questions which do not apply to you.

EXAMPLE 3:

> The next questions are about the visit you made to the doctor on the date shown on the cover of this questionnaire. Please think about only that visit when you answer these questions.

8. Was this your first visit to this doctor?

Yes ..... 1 (GO TO Q. 9)

No ..... (2) (ANSWER Q. 8-A)

IF NO:
8-A. When did you first see this doctor?

If you don't remember exactly, give your best guess.

1	2		8	0
Month			Year	

In Example 3, a person who circled "1" would not answer Question 8-A, but would go directly to Question 9.

If there are no instructions after your answer, go to the very next question.

For some questions, you are asked to supply a number or other information. In these cases a box or line is provided for your answer. Example 3, 8-A, above, illustrates this type of question. If you are unsure, please give your best guess.

Please answer every question that applies to you. If none of the answers provided for a question seems exactly right, choose the one that is nearest to being right for you.

NOW, PLEASE BEGIN WITH THE QUESTIONS ON THE NEXT PAGE.

42. Which of the following categories best describes your total family income from all sources--before taxes--for the year 1980?

(Circle one.)

Under $6,000.....	01	64-65/
$6,000 to $6,999.....	02	
$7,000 to $7,999.....	03	
$8,000 to $9,999.....	04	
$10,000 to $12,499.....	05	
$12,500 to $14,999.....	06	
$15,000 to $17,499.....	07	
$17,500 to $19,999.....	08	
$20,000 to $22,499.....	09	
$22,500 to $24,999.....	10	
$25,000 to $49,999.....	11	
$50,000 or over.....	12	

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43. Please enter the date on which you completed this questionnaire:

66-67/

☐☐	☐☐
Month	Day

68-69/

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44. Name of person completing this questionnaire:

Name: _____

If you are not the patient named on the front cover, but you are completing this for that patient, what is your relationship to that patient?

_____ 70-71/

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. THE INFORMATION YOU HAVE PROVIDED WILL HELP RESEARCHERS UNDERSTAND THE MEDICAL CARE NEEDS OF PEOPLE ACROSS THE COUNTRY.

PLEASE RETURN THE QUESTIONNAIRE TODAY IN THE PRE-ADDRESSED ENVELOPE PROVIDED.